

APPENDIX E

Greenhouse Gas Emissions Analysis

**Greenhouse Gas Emissions Analysis
for the
North City Project
City of San Diego, California
PTS#499621**

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AADF	annual average daily flow
AB	Assembly Bill
BAC	biological activated carbon
BAU	business-as-usual
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CALGreen	California's Green Building Standards
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan (California)
CARB	California Air Resources Board
CAT	Climate Action Team
CEQA	California Environmental Quality Act
CH ₄	methane
City	City of San Diego
CO ₂	carbon dioxide
CO ₂ E	carbon dioxide equivalent
CFCs	chlorofluorocarbons
CPUC	California Public Utilities Commission
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	United States Environmental Protection Agency
GHG	greenhouse gas emissions
GWP	global warming potential
HCFCs	hydrochlorofluorocarbons
HDPE	high-density polyethylene
HFCs	hydrofluorocarbons
I-	Interstate
ICE	internal combustion engine
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt-hour
lb	pound
LEED	Leadership in Energy and Environmental Design
LFG	landfill gas
LFG Pipeline	Landfill Gas Pipeline
MBC	Metro Biosolids Center
MCAS Miramar	Marine Corps Air Station Miramar
MF	membrane filtration
MG	million gallons

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Acronym/Abbreviation	Definition
MGD	million gallons per day
MMT	million metric tons
MOU	Memorandum of Understanding
mpg	miles per gallon
MT	metric tons
MTBS	Mission Trails Booster Station
MTS	Metropolitan Transit System
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NCPWF	North City Pure Water Facility
NCWRP	North City Water Reclamation Plant
NF ₃	nitrogen trifluoride
NHTSA	National Highway Traffic Safety Association
N ₂	nitrogen gas
N ₂ O	nitrous oxide
NO _x	oxides of nitrogen
NO ₃	nitrate
O ₃	ozone
O&M	operations and maintenance
PFCs	perfluorocarbons
Plan	federal Climate Action Plan
Point Loma WWTP	Point Loma Wastewater Treatment Plant
Project	North City Project
RO	reverse osmosis
RPS	Renewable Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDAB	South Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas and Electric
SF ₆	sulfur hexafluoride
SR-	State Route
SPPF	Small Power Producing Facility
TAC	toxic air contaminant
TPA	Transit Priority Area
TSS	total dissolved solids
UV/AOP	ultraviolet/advanced oxidation process
WRP	water reclamation plant
WTP	water treatment plant
WWTP	wastewater treatment plant

Greenhouse Gas Emissions Analysis for the North City Project

SUMMARY

The North City Project (Project) is a City of San Diego Public Utilities Department plan to produce 30 million gallons per day (MGD) of potable recycled water. The North City Project will expand the existing North City Water Reclamation Plant (NCWRP) and construct an adjacent North City Pure Water Facility (NCPWF). Two alternative purified water pipelines are considered: one to Miramar Reservoir and one to San Vicente Reservoir. Other Project components include a new pump station and wastewater forcemain to deliver additional wastewater to the NCWRP; a brine/centrate discharge pipeline; upgrades to the existing Metro Biosolids Center (MBC); a new renewable energy facility at the NCWRP (North City Renewable Energy Facility); and a new Landfill Gas (LFG) Pipeline between the Miramar Landfill gas collection system and the NCWRP.

There are two Project Alternatives proposed. The Miramar Reservoir Alternative would construct the NCPWF – Miramar Reservoir and would pipe purified water to Miramar Reservoir. The San Vicente Reservoir Alternative would construct the NCPWF – San Vicente Reservoir at the same location as the NCPWF, but would include fewer treatment processes and would pipe purified water to the San Vicente Reservoir rather than the Miramar Reservoir. The San Vicente Reservoir Alternative would also include an additional pump station, the Mission Trails Booster Station (MTBS), along the San Vicente Pure Water Pipeline (San Vicente Pipeline). The Miramar Reservoir Alternative would include improvements at the Miramar Water Treatment Plant (WTP).

The Project's potential effect on global climate change was evaluated, and emissions of greenhouse gases (GHGs) were estimated based on the use of construction equipment and vehicle trips associated with construction activities, as well as operational emissions once construction phases are complete. The annual Project-generated GHG emissions were estimated to result in a net reduction of approximately 32,3678,639 metric tons of carbon dioxide equivalent (MT CO₂E) per year as a result of Project operations for the Miramar Reservoir Alternative and 34,9308,138 MT CO₂E for the San Vicente Reservoir Alternative. The North City Project was deemed to be consistent with the City of San Diego's Climate Action Plan (CAP) Measures. The Project did not have a cumulative impact on the environment when evaluated against the City of San Diego's CAP Checklist. Therefore, GHG impacts would be considered **less than significant**.

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Greenhouse Gas Emissions Analysis for the North City Project

1 INTRODUCTION

The North City Project would use advanced water purification technology to produce potable water from recycled water and provide a safe, reliable, and cost-effective drinking water supply for San Diego. The North City Project consists of the design and construction of a new North City Pure Water Facility (NCPWF), upgrades to existing water reclamation facilities, and design and construction of new pump stations and pipelines. The North City Project would construct the NCPWF adjacent to the existing North City Water Reclamation Plant (NCWRP). Upgrades would occur at the existing NCWRP in order to provide sufficient tertiary influent for the NCPWF as well as to connect the existing centrate line with the proposed brine/centrate line. Pump station and pipeline facilities would convey different types of flows to and from the treatment facilities for: (1) diverting wastewater flows to NCWRP, (2) conveying recycled water to the NCPWF, (3) conveying purified water from the NCPWF to a reservoir, and (4) transporting waste flows (brine and sludge) from treatment processes to solids handling facilities or back into the Metro Sewer System. Upgrades would also occur at the Metro Biosolids Center (MBC) to handle the additional brine and sludge produced by the NCWRP expansion and advanced water purification process. A new renewable energy facility would be constructed at NCWRP, which would receive landfill gas (LFG) from the City's Miramar Landfill gas collection system via a new gas pipeline.

From the NCPWF, purified water would be piped to either the Miramar Reservoir or San Vicente Reservoir via a purified water pipeline.

The North City Project would create up to 30 million gallons per day (MGD) of locally controlled potable water and reduce flows to the Point Loma Wastewater Treatment Plant (Point Loma WWTP), which in turn would reduce total suspended solids (TSS) discharged to the ocean.

1.1 Purpose

The purpose of this report is to estimate and evaluate the potential greenhouse gas (GHG) impacts associated with implementation of the North City Project (Project) relative to the City's Significance Determination Thresholds for GHGs (City of San Diego 2016a). The report includes a quantitative analysis of Project-related greenhouse gas emissions.

1.2 Project Location

The Project includes a variety of facilities located throughout the central coastal areas of San Diego County. An overview of the overall Project system is shown on Figures 1 and 2. Figures 3 and 4 show the location of proposed facilities and pipelines for the Miramar Reservoir Alternative and San Vicente Reservoir Alternative. A new pure water facility and three pump stations would be located within the corporate boundaries of the City of San Diego (City). Pipelines would traverse a number of local jurisdictions, including the cities of San Diego and

Greenhouse Gas Emissions Analysis for the North City Project

Santee, and the community of Lakeside and other areas of unincorporated San Diego County, in addition to federal lands within Marine Corps Air Station (MCAS) Miramar.

1.3 Project Description

The North City Project would use advanced water purification technology to produce purified water from recycled water. From the NCPWF, purified water would be piped to a reservoir, where it would blend with impounded water and imported supplies. The water would then receive further treatment at a potable water treatment plant before being distributed as potable water.

The North City Project would create up to 30 MGD of locally controlled potable water and reduce flows to the Point Loma WWTP, which in turn would reduce TSS discharged to the ocean. The North City Project would construct facilities that have the ability to produce at least 30 MGD by 2021.

There are two North City Project Alternatives (Project Alternatives) proposed. The Miramar Reservoir Alternative would construct the NCPWF – Miramar Reservoir and would convey purified water to the Miramar Reservoir. The San Vicente Reservoir Alternative would also construct the NCPWF – San Vicente Reservoir at the same location as the NCPWF, but would include fewer treatment processes and would pipe purified water to the San Vicente Reservoir rather than the Miramar Reservoir. The San Vicente Reservoir Alternative would also include an additional pump station, the Mission Trails Booster Station (MTBS), along the San Vicente Pure Water Pipeline (San Vicente Pipeline). The Miramar Reservoir Alternative would include improvements at the Miramar Water Treatment Plant (WTP) (see Figure 3 for a map of facilities proposed by the Miramar Reservoir Alternative and Figure 4 for a map of facilities proposed by the San Vicente Reservoir Alternative). Table 1.3-1 shows a comprehensive list of all components associated with the North City Project and which components are associated with each Project Alternative. The two Project Alternatives are discussed in more detail below.

**Table 1.3-1
North City Project Components**

Segment	Miramar Reservoir Alternative	San Vicente Reservoir Alternative
Morena Pump Station, Wastewater Force Main, and Brine/Centrates Line (Morena Pump Station and Pipelines)	X	X
North City Water Reclamation Plant (NCWRP) Expansion	X	X
North City Pure Water Facility (NCPWF) Influent Pump Station	X	X
North City Pure Water Facility (NCPWF)	X	X
North City Pump Station	X	X
North City Pure Water Pipeline (North City Pipeline)	X	
San Vicente Pure Water Pipeline (San Vicente Pipeline)		X

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**Table 1.3-1
North City Project Components**

Segment	Miramar Reservoir Alternative	San Vicente Reservoir Alternative
Mission Trails Booster Station (MTBS)		X
Metro Biosolids Center (MBC) Improvements	X	X
Miramar Water Treatment Plant (WTP) Improvements	X	
North City Renewable Energy Facility	X	X
Landfill Gas (LFG) Pipeline	X	X
Pure Water Dechlorination Facility (Dechlorination Facility)	X	

1.3.1 Miramar Reservoir Alternative

The Miramar Reservoir Alternative includes (1) a new pump station at Morena Boulevard, a wastewater forcemain, and brine/centrate pipeline (Morena Pump Station and Pipelines); (2) expansion of the existing NCWRP; (3) construction of a new influent pump station at NCWRP and conveyance pipeline between NCWRP and the NCPWF; (4) construction of the new NCPWF; (5) construction of a new North City Pump Station; (6) construction of a new North City Pure Water Pipeline (North City Pipeline); (7) construction of a new renewable energy facility at NCWRP (North City Renewable Energy Facility); (8) a new landfill gas pipeline between the Miramar Landfill gas collection system and the NCWRP; (9) upgrades at the MBC; and (10) improvements at the Miramar WTP).

Figure 3 provides an overview of the Miramar Reservoir Alternative. The Miramar Reservoir Alternative project facilities and components are described in detail below.

Morena Pump Station and Pipelines

In order to utilize the proposed expanded capacity of the NCWRP, approximately 32 MGD annual average daily flow (AADF) of additional wastewater flows that would normally be conveyed to the Point Loma WWTP would need to be diverted to the NCWRP. The Morena Pump Station and Wastewater Forcemain are proposed to deliver maximum flow of 37.7 MGD of raw wastewater to the NCWRP, expanding the NCWRP's production capacity from 30 MGD to 52 MGD in dry weather conditions. Wastewater will be conveyed to the Morena Pump Station by connections with four existing sanitary sewer trunk sewers: the 78-inch North Mission Valley Interceptor, the 72-inch Morena Boulevard Interceptor No. 14, the 33-inch Morena Boulevard Trunk Sewer No. 11, and the 60-inch East Mission Bay Trunk Sewer No. 4.

The proposed Morena Pump Station is to be located on a parcel currently owned by the San Diego Humane Society and the Society for the Prevention of Cruelty to Animals. The site is

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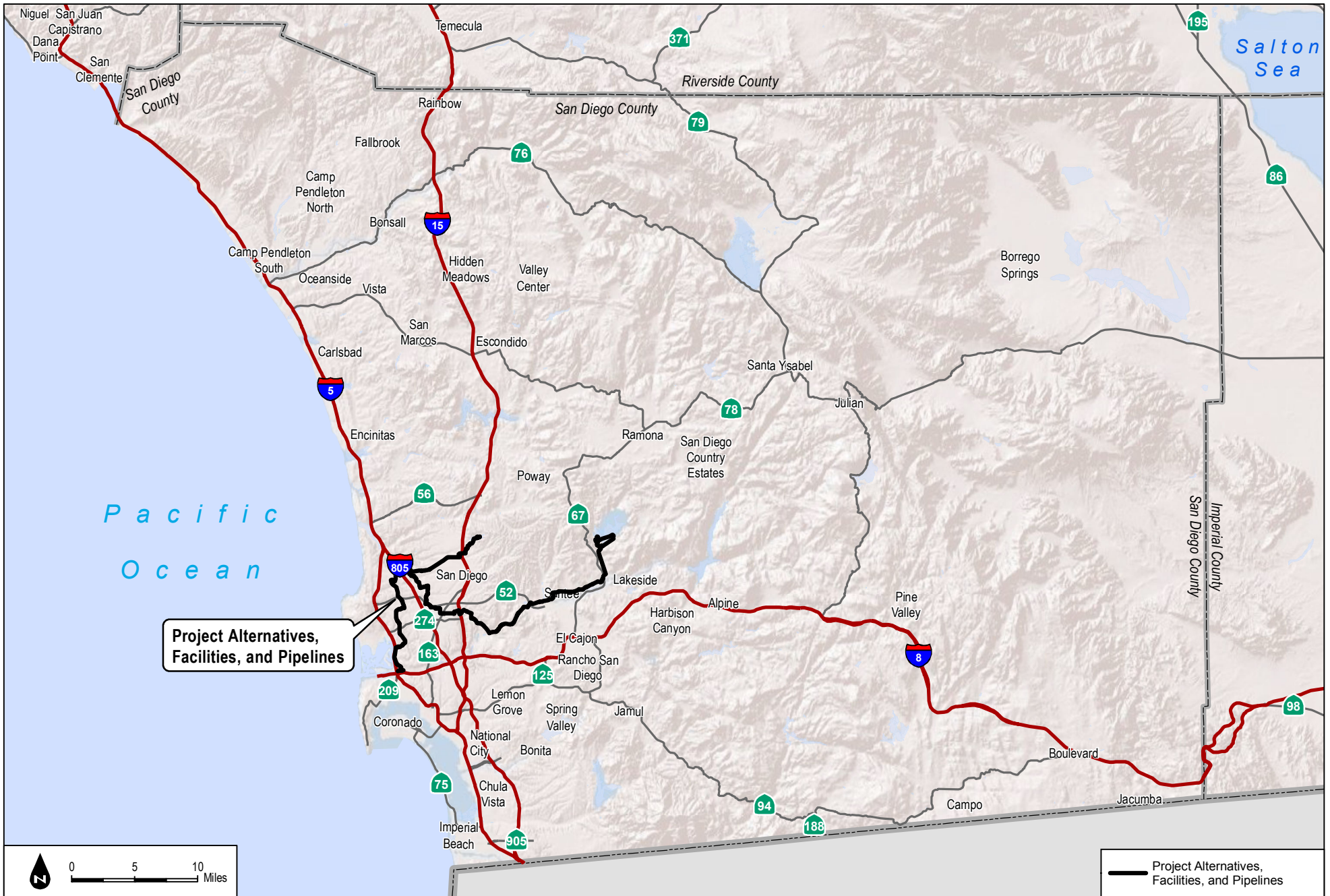
approximately 1 acre and is near the intersection of Sherman Street and Custer Street. The proposed Morena Pump Station would consist of (1) a junction structure and intake screening facility – flow separator and screening structures, (2) a pump station building, (3) odor control and chemical storage, (4) an energy dissipater for the 30-inch brine/centrate line, (5) a transformer, (6) an electrical and motor control center building, and (7) a diversion structure.

The pump station will be an approximately 92-foot-long x 66-foot-wide, reinforced, cast-in-place concrete structure. The finished floor of the pump room and wet well will be approximately 52 feet below finished grade. Due to the location of the pump station, and additional depth of 6 to 10 feet may be required for sub-grade stabilization below the groundwater level. The top slab will extend above finish grade approximately 1 foot, 6 inches at the ridge and taper down to 1 foot, 3 inches at the edges. It is anticipated that the cast-in-place walls will be approximately 4 feet thick and include external buttresses for lateral soil support.

Off-site infrastructure of the pump station facility, excluding the Morena Wastewater Forcemain and Brine/Centrate Line (Morena Pipelines), consists of a storm drainage line, pump station inflow piping, overflow piping, and associated subgrade diversion structures. Diversion structure No. 1 will be approximately 14 feet long by 12 feet wide; diversion structure No. 2 will be approximately 18 feet long by 10 feet wide. Flow control gates will be installed at each diversion structure for flow management into the pump station.

The Morena Pump Station would convey new wastewater approximately 11 miles through a new 48-inch-diameter wastewater forcemain to the existing NCWRP. The wastewater forcemain will connect to the existing 60-inch-diameter reinforced steel (RS) line prior to entering the existing headworks building at NCWRP.

Approximately 6 MGD AADF of brine (produced as a by-product of the advanced water purification treatment process) and 6 MGD AADF of centrate (product remaining after centrifugation at MBC) will be conveyed via a new 30-inch-diameter gravity flow line from the new NCPWF back to Morena Pump Station, and then to a sanitary sewer located in Friars Road where it will ultimately flow to the Point Loma WWTP. The brine/centrate line will combine with the 60-inch-diameter overflow sewer and would discharge downstream of the diversion structures back to the Mission Valley Interceptor with sufficient distance as to not recirculate brine flows into the screening facility of the pump station.



SOURCE: City San Diego 2016; ESRI 2016

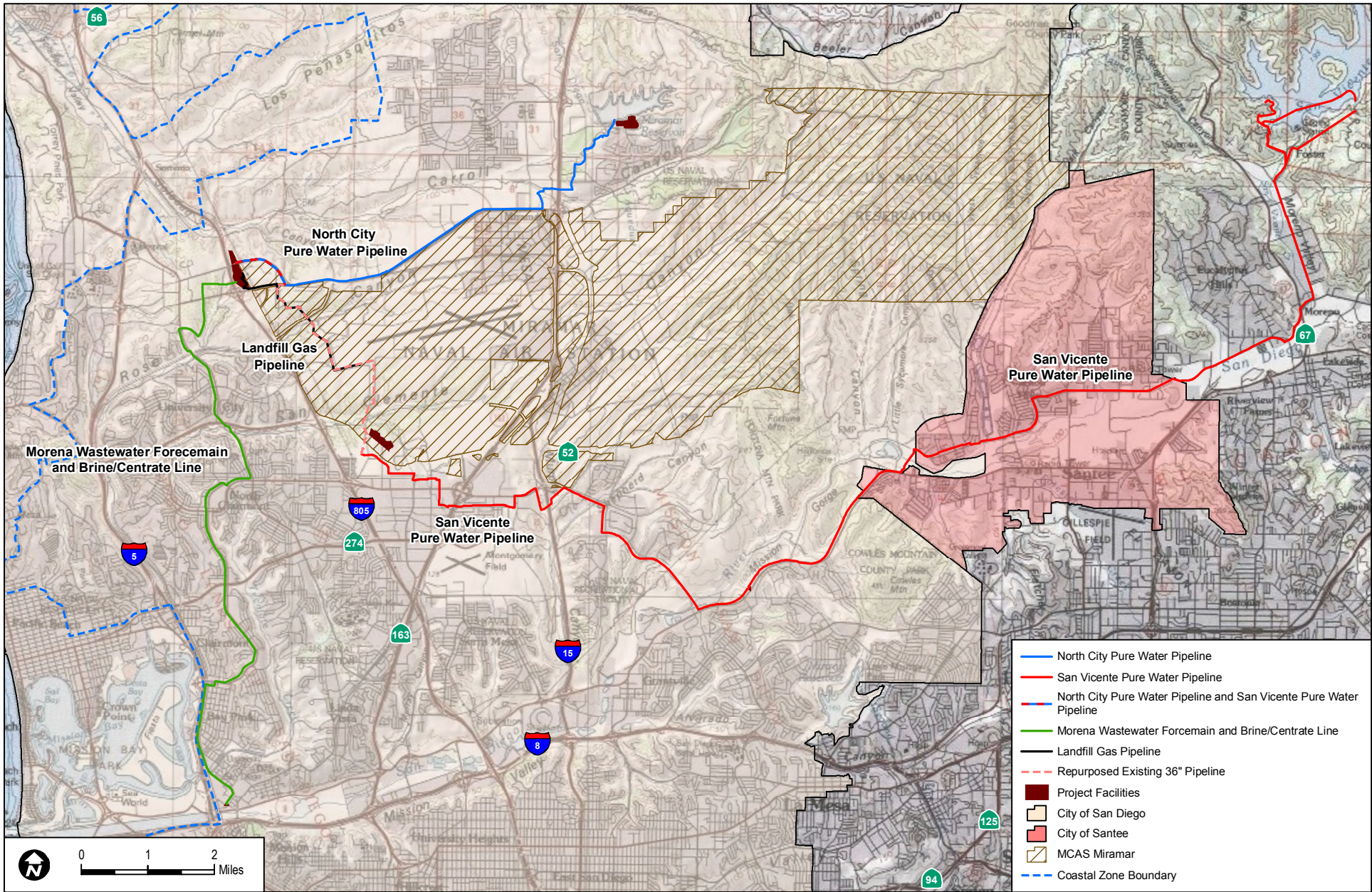


Pure Water San Diego Program North City Project Greenhouse Gas Technical Report

FIGURE 1
Regional Map

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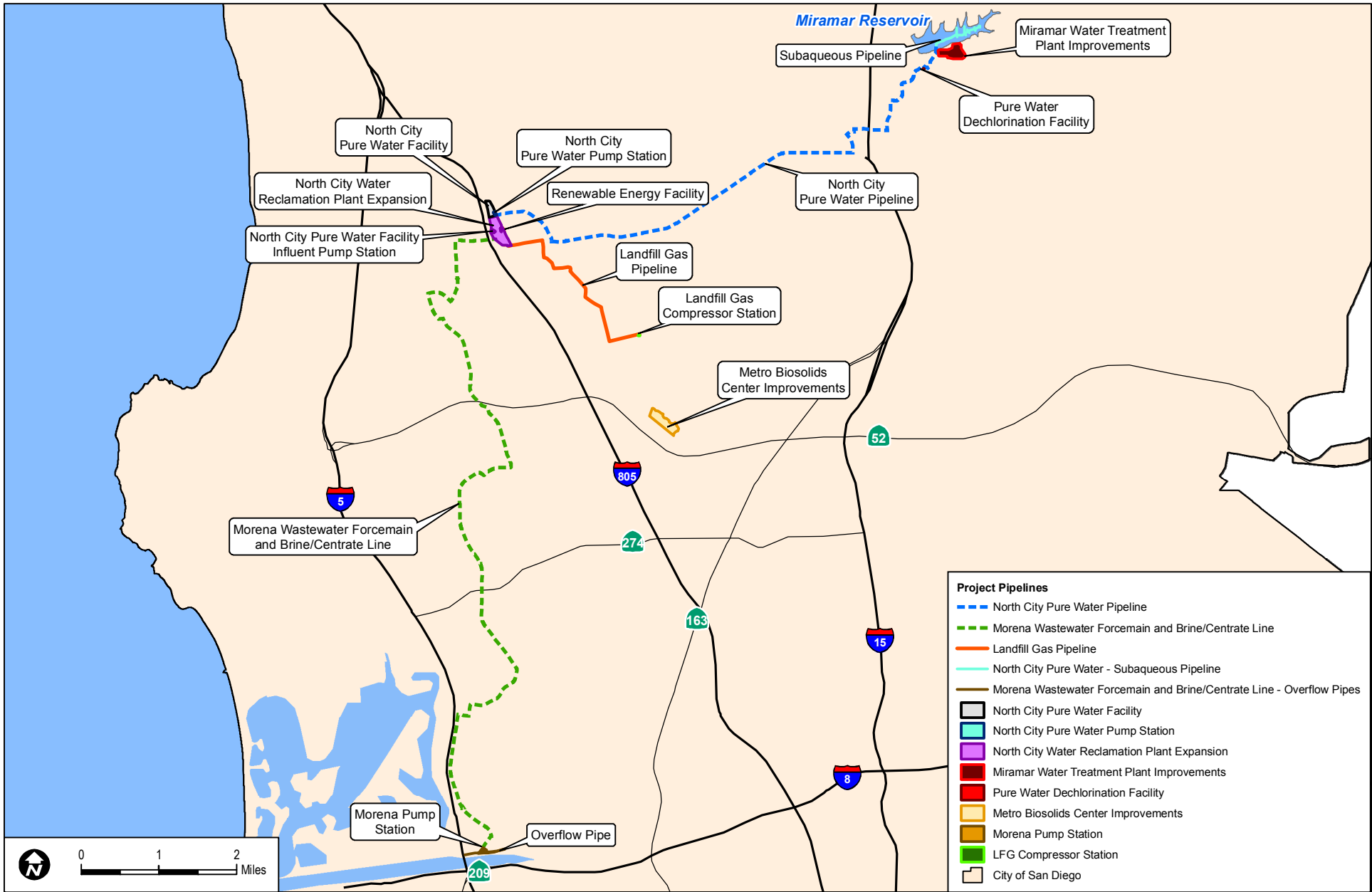
SOURCE: USGS 7.5-Minute Series Del Mar, Poway, San Vicente Reservoir, La Jolla, La Mesa, El Cajon Quadrangles; City of San Diego 2016; CA Coastal Commission

FIGURE 2
Vicinity Map



Greenhouse Gas Emissions Analysis for the North City Project

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SOURCE: City of San Diego, 2015, 2016; SanGIS 2016

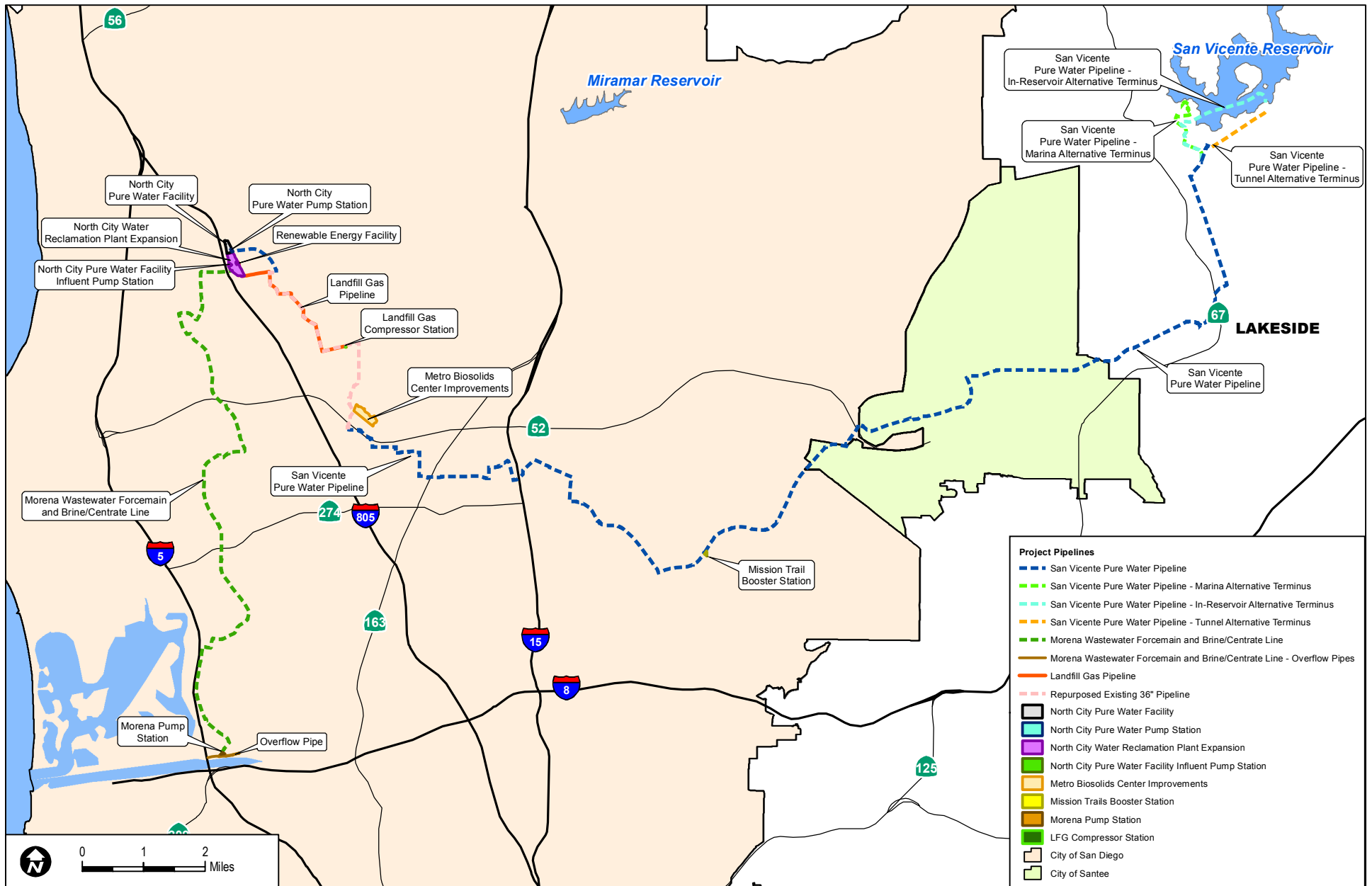


FIGURE 3

Miramar Reservoir Alternative

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SOURCE: City of San Diego, 2015, 2016; SanGIS 2016



FIGURE 4

San Vicente Reservoir Alternative

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The Morena Pipelines will follow the same alignment as depicted in Figure 2. The alignment would begin in an open-cut section near the north corner of the Morena Pump Station site, entering the public street right-of-way on Custer Street. The alignment would generally head north along Sherman Street, Morena Boulevard, and West Morena Boulevard. The alignment would cross Tecolote Road bridge and Tecolote Creek, then continue generally heading north and east along Ingulf Street, Denver Street, Clairemont Drive, Clairemont Mesa Boulevard, and Genesee Avenue. It would cross under the bridge at San Clemente Canyon near the State Route 52 (SR-52) on-ramp. Following the bridge, the alignment would continue along Genesee Avenue, crossing SR-52 and the Metropolitan Transit System (MTS) railroad tracks. After the railroad tracks, the alignment would head east on Nobel Drive and then continue heading north on Towne Centre Drive. The alignment would turn east on Executive Drive and cross Interstate 805 (I-805). The alignment would end at NCWRP. Two trenchless installations are proposed along the Morena Pipelines alignment and included the following: (1) the railroad tracks owned by the MTS at Rose Canyon north of University City High School and (2) the I-805 at the terminus of Executive Drive to the NCWRP. An additional trenchless installation would occur where the overflow pipeline crosses MTS right-of-way near the Morena Pump Station.

North City Water Reclamation Plant Expansion

To ensure the 30 MGD of purified water can be produced at the NCPWF, the NCWRP will undergo an expansion of the primary, secondary, and tertiary treatment processes, as well as the corresponding support systems.

To increase capacity at the NCWRP, a number of new process units and tankage would be required. Process units requiring expansion include influent screening, primary sedimentation, flow equalization, aeration basins, secondary clarification, and tertiary filtration. The expanded NCWRP facilities are expected to include an additional bar screen, grit pumps, primary sedimentation with chemically enhanced primary treatment, a primary equalization basin, aeration basins using biological nutrient removal, secondary clarifiers, tertiary filters, and additional ancillary and support systems.

A brine-centrate valve vault will be constructed on the NCWRP site adjacent to the tunnel that conveys the brine/centrate and wastewater force mains on the western edge of the NCWRP next to the existing aeration basins. The brine-centrate valve vault would be approximately 22 feet by 14 feet, within which the centrate pipeline would connect into the brine/centrate pipeline. The vault would allow for personnel access to check valves and perform routine maintenance.

North City Pure Water Facility Influent Pump Station

The NCPWF Influent Pump Station will be constructed at the NCWRP and will convey tertiary effluent from the NCWRP to the NCPWF. The NCPWF Influent Pump Station will have a

Greenhouse Gas Emissions Analysis for the North City Project

maximum capacity of 42.5 MGD to enable the NCPWF to produce a maximum of 34 MGD AADF of purified water after accounting for recycle and other streams. The NCPWF Influent Pump Station would be located on the west side of the NCWRP adjacent to the tertiary filters to divert tertiary effluent from upstream of the chlorination facilities and pump it to the NCPWF. The NCPWF Influent Pump Station would consist of a single enclosed 6,700-square-foot building approximately 45 feet high and would contain three separate rooms: a pump room, HVAC equipment room, and electrical room.

A pump station and associated pipes and appurtenances are currently located within the site. These components will be removed prior to construction of the NCPWF Influent Pump Station. The site is partly covered with grass and is relatively flat.

North City Pure Water Facility

The new NCPWF would be located on the vacant 10-acre City-owned lot across Eastgate Mall to the north of the NCWRP. The NCPWF would produce 30 MGD AADF of purified water. A portion of the purified water would be returned to the NCWRP to reduce the TSS concentration of the disinfected tertiary treated effluent to 1,000 milligrams per liter (mg/L), a level suitable for irrigation. Approximately 30 MGD AADF of purified water will be pumped to Miramar Reservoir.

The treatment process includes an ozone system, biological activated carbon filtration (BAC), membrane filtration (MF), reverse osmosis (RO), and ultraviolet/advanced oxidation process (UV/AOP), before it is stabilized and chlorinated prior to pumping out to the reservoir (note under the San Vicente Reservoir Alternative the NCPWF would not include the ozone system or BAC). In addition to process areas for each stage of treatment at the NCPWF, the facility would include chemical feed systems and post-treatment chemical storage.

Access to the site will be from Eastgate Mall, and the entrance will be coordinated with the entrance to the NCWRP to be at the same traffic signal along Eastgate Mall. An approximately 15,000-square-foot operations and maintenance (O&M) building with three above-grade stories will be built as part of the NCPWF. The third level of the O&M building will be dedicated for a water quality testing laboratory.

North City Pure Water Pump Station

The North City Pump Station would be located on the southeast corner of the NCPWF. The North City Pump Station will have three duty pumps and one standby pump, all of which are 1,000 horsepower (HP) motor pumps and vertical-turbine. Each pump will be design to deliver a flow rate of 7,593 gallons per minute. The North City Pump Station will serve as the NCPWF's only effluent pump station and will convey purified water from the NCPWF Product Water Storage Tank to a reservoir.

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North City Pure Water Pipeline

The North City Pipeline will transmit purified water approximately 8 miles from the NCPWF to Miramar Reservoir where it will be blended with the imported raw water in the Miramar Reservoir and receive additional treatment at the Miramar WTP.

The North City Pipeline will be designed for an average daily flow of 30 MGD with a minimum daily flow of 23 MGD and a maximum daily flow of 33 MGD. A 48-inch-diameter welded steel pipe is the recommended width and material for the North City Pipeline as the most suitable for the design conditions.

The North City Pipeline alignment is shown on Figure 2. Detailed cross sections of the North City Pipeline are included on Sheets C1 through C51 in the Basis of Design Report for the North City Conveyance System (Brown and Caldwell 2016). The North City Pipeline is proposed to travel through the University, Mira Mesa, and Scripps Miramar Ranch communities (City of San Diego). The North City Pipeline would also cross federal lands in MCAS Miramar along segments of Miramar Road and would cross an unincorporated area of the County of San Diego immediately after the I-15 crossing.

The North City Pipeline alignment would begin in an open trench in Eastgate Mall and would head southeast, with a short trenchless section just before Eastgate Court. At Miramar Road, the North City Pipeline would continue east for approximately 4.5 miles, with a bridge over the MTS Railway crossing and a short trenchless section under the BNSF Railway crossing. The North City Pipeline would turn north on Kearny Villa Road and then turn east on Candida Street. The North City Pipeline would head north on Via Pasar via a trenchless segment, and then continue east on Via Excelencia in an open-cut section. A trenchless segment would cross I-15 then would return to an open-cut section across private property then turn north on Businesspark Avenue. The North City Pipeline would continue north on Carroll Canyon Road then head east on Hoyt Park Drive and Meanley Drive, continuing east/northeast before crossing Evans Pond in a trenchless segment.

The final segment of the North City Pipeline will consist of a subaqueous pipeline within Miramar Reservoir. The segment of pipeline will begin at the Miramar WTP site and continue to the far east bank of Miramar Reservoir. The pipeline would be a submerged, 4,800-foot-long HDPE pipe ranging in diameter from 8 inches to 54 inches with 94 outlets and 188 subaqueous diffusers along the bottom of Miramar Reservoir.

North City Renewable Energy Facility

The Project requires new renewable energy facilities in order to provide power to the expanded NCWRP facilities as well as the NCPWF and North City Pump Station. The new facility

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includes a total of 15.4 megawatts (MW) of new generation capacity combined with 5 MW of existing power generation capacity at NCWRP.

The new North City Renewable Energy Facility consists of 6.3 MW of new capacity in a Small Power Producing Facility (SPPF) that uses 100% LFG as fuel. The additional 9.1 MW of new power generation capacity within the facility uses LFG supplemented with natural gas as fuels, with 80% LFG and 20% natural gas.

The SPPF system requires a total of three new internal combustion engines (ICE) and generator units, the 3.8 MW Caterpillar Model CG260-16 IC or equivalent. The remaining power generation capacity requires a total of three new ICE and generator units, the same model as the SPPF. One additional 3.8 MW Caterpillar Model CG260-16 IC or equivalent ICE will serve as backup to the SPPF engines or the mixed-gas power generation engines.

The engines will be placed inside a building located immediately south of the new circular secondary clarifiers and north of the existing emergency power generation facility at NCWRP. The estimated stack height of the engines' exhaust stacks is 55 feet measured from the finished ground elevation immediately adjacent to the renewable energy building (at approximate elevation 354 feet) which is approximately 30 feet above the top of the building.

A skid-mounted equipment package consisting of a natural gas compressor system, air receivers, and oil storage will be located on the site adjacent to the renewable energy building. Two additional buildings will be included on the site for controls equipment and storage. The facility will also include a gas cleaning and cooling equipment skid and an electrical switchyard. An area chemical storage, containment, and feed facility will be provided for emissions control.

The facility layout includes relocation of the City's existing 1.6 MW SPPF engine to a new location on the site near the existing emergency power generation equipment at NCWRP in order to accommodate the layout of the new renewable energy facility.

The expanded renewable energy facility covers an area of approximately 1 acre and is fully contained within the existing NCWRP property. Approximately half of that area is existing impervious paved surface, and the entire area will be impervious once the facility is constructed. The site topography for the new renewable energy facility at NCWRP will necessitate a perimeter retaining wall approximately 300 feet in length with a maximum height of 22 feet. The retaining wall will be either a mechanically stabilized earth wall or reinforced concrete. The Project will include earthwork and other site preparation activities for construction of the retaining wall. The renewable energy facility will include utility relocations, new utilities, equipment, earthwork, retaining wall, paving, and other site-preparation activities.

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Landfill Gas Pipeline

The new North City Renewable Energy Facility will receive LFG from the City's Miramar Landfill gas collection system via a new 12-inch diameter gas line. The new gas line will parallel an existing 10-inch gas line that conveys LFG from the landfill to fuel the existing emergency power generation units at NCWRP. Approximately 3,627 linear feet of the new gas pipeline will be constructed within the limits of the City's existing 40-foot utility easement where it crosses the Veteran's Administration (VA) Miramar National Cemetery. An expanded additional 10-foot easement is planned along the remainder of the alignment outside of the VA to facilitate construction and future maintenance activities. The approximately 15,885 linear feet alignment runs from the existing Miramar Landfill north along the western end of the MCAS Miramar property to the NCWRP site.

A new 5,000-square-foot gas compressor station will be sited immediately adjacent to an existing gas compressor station at the Miramar Landfill in order to pressurize and convey the LFG gas from the landfill to NCWRP.

Metro Biosolids Center Improvements

The MBC is located north of SR-52, adjacent to the Miramar Landfill. Projected flows of raw solids from the NCWRP will increase, while projected flows of digested solids from Point Loma WWTP will remain roughly constant such that MBC will be required to provide on-site anaerobic digestion for a greater percentage of the system's biosolids output. In addition to changes in quantity, changes in treatment processes at the NCWRP and Point Loma WWTP may change the quality, and hence treatability, of the two biosolids streams. Raw solids flows are expected to increase by a factor of 7 from a current maximum operating flow of 0.89 MGD to a projected flow of 6.55 MGD at maximum conditions; solids in pounds per day (lb/d) are expected to increase by a factor of 5:1 from 56,000 lb/d (current) to 294,000 lb/d (maximum conditions).

Improvements at MBC would include expanding the existing closed-loop grit removal system; replacing the existing thickening centrifuges (a total of six new centrifuges will be installed); upgrading digesters, including replacing the existing digester gas laterals with larger lines and larger gas handling appurtenances, installing one additional flare, and replacing existing biogas booster blowers with three new blowers and increasing the size of the biogas feed line from the blowers to the cogeneration facility; installing new thickened sludge supply line; upgrading the sludge feed pumps and polymer feed pumps; installing three new centrate pumps and variable frequency drives; adding a fourth off-the-shelf replacement peristaltic pump; and expansion of existing piping systems. The current centrate pump station at MBC would require pumps to be upgraded to be capable of higher flows and pressure. In addition, the centrate forcemain would need regular maintenance to clean the pipe and restore capacity to its full potential. As part of the

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pipe cleaning, existing plug valves would need to be replaced with full port valves. Launching and receiving pits may need to be constructed.

Miramar Water Treatment Plant Improvements

Under the Miramar Reservoir Alternative, purified water discharged into the Miramar Reservoir will be pumped via the existing Miramar Reservoir Pump Station to the Miramar WTP for treatment and eventual distribution. Currently, the majority of the water treated at the Miramar WTP is fed directly to the plant, and the Miramar Reservoir is primarily used for balancing flows and emergency storage. Under the Miramar Reservoir Alternative, the Miramar Reservoir will receive approximately 30 MGD AADF of purified water on a more or less continuous basis, meaning that the Miramar Reservoir Pump Station must operate at roughly 30 MGD AADF to maintain the inflow/outflow balance in the reservoir.

This increased use calls for rehabilitation of the Miramar Reservoir Pump Station, which includes upgrading the existing pumps with variable frequency drives along with various mechanical upgrades to the valves and piping. The additional pumping will result in an additional annual power demand of 586,000 kilowatt-hours (kWh). However, an on-site 1 MW solar photovoltaic system will be installed to completely cover the power needs of the facility.

Pure Water Dechlorination Facility

The Dechlorination Facility will be located at the end of Meanley Drive off the cul-de-sac on the City's property for the Miramar Recycled Water Storage Tank. The facility will include an approximately 768-square-foot above-grade building to house chemical storage tanks, dosing pumps, analyzers, and associated piping valves and appurtenances. The NCPWF purified water will be chlorinated to maintain chlorine residual and prevent regrowth within the North City Pipeline. Prior to blending the purified water with the raw water at Miramar Reservoir, the remaining free chlorine residual will be removed from the purified water to protect the aquatic life in the lake. The Dechlorination Facility would reduce the residual chlorine concentration to below the required limit.

1.3.2 San Vicente Reservoir Alternative

The San Vicente Reservoir Alternative shares most of the same components with the Miramar Reservoir Alternative. Project components described above under the Miramar Reservoir Alternative that are also common to the San Vicente Reservoir Alternative include (1) the Morena Pump Station and Pipelines, (2) expansion of the existing NCWRP, (3) construction of a new influent pump station at NCWRP and conveyance pipeline between NCWRP and the NCPWF, (4) a new renewable energy facility at the NCWRP, (5) a new gas pipeline between the Miramar Landfill gas collection system and the NCWRP, and (6) upgrades at the MBC.

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Because of the different sizes of the Miramar Reservoir and San Vicente Reservoir, the design of the NCPWF for each will be slightly different. However, for the purposes of the noise analysis, the facilities would be similar enough that no additional discussion is provided under this alternative, and the reader is referred to the discussion under the Miramar Reservoir Alternative. Project components which are applicable only to the San Vicente Reservoir Alternative are discussed separately below and include (1) San Vicente Purified Water Pipeline (San Vicente Pipeline) including the three alternative reservoir inlet options: Tunnel Alternative Terminus, In-Reservoir Alternative Terminus, and Marina Alternative Terminus; and (2) Mission Trails Booster Station (MTBS). Figure 4 provides an overview of the San Vicente Reservoir Alternative.

San Vicente Pipeline

The San Vicente Pipeline will be designed for an average daily flow of 30 MGD with a minimum daily flow of 27 MGD and a maximum daily flow of 35 MGD. The San Vicente Pipeline includes a segment (approximately 21,300 linear feet) of existing recycled water pipe that will be repurposed for purified water conveyance. That segment currently serves non-potable reuse customers. Under the San Vicente Reservoir Alternative, the San Vicente Pipeline will continue to supply those non-potable reuse customers with purified water. Approximately 1.4 MGD AADF will be provided as non-potable reuse to existing customers.

The remaining 133,475 linear feet of the San Vicente Pipeline would be newly constructed using a combination of open-cut trench and trenchless construction methods to deliver 30 MGD AADF to the San Vicente Reservoir. A 48-inch-diameter and 60-inch-diameter welded steel pipe is the recommended width and material for the San Vicente Pipeline as the most suitable for the design conditions.

The general alignment of the San Vicente Pipeline is shown on Figure 4. Detailed cross sections of the San Vicente Pipeline are included on Sheets 7 through 89 in Appendix K of the 10% Engineering Design Report North City Plant to San Vicente Pipeline (Brown and Caldwell 2015). The pipeline is proposed to travel through the University, Kearny Mesa, Navajo, and Tierrasanta, and East Elliot communities of the City of San Diego; the City of Santee; and the incorporated community of Lakeside in the County of San Diego.

The first approximately 5,500 linear feet of the San Vicente Pipeline would follow the same alignment as the North City Pipeline along Eastgate Mall. At Miramar Road, purified water would be conveyed via an existing 36-inch-diameter recycled water pipeline for approximately 21,300 linear feet as described above. This repurposed 36-inch-diameter pipeline traverses federal lands, including the Miramar National Cemetery and MCAS Miramar. The new 48-inch-diameter San Vicente Pipeline would begin again in an open-cut segment on Copley Drive and would continue southeast until heading due east on Copley Park Place, then south on Convoy

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Street, then east again on Convoy Court. The San Vicente Pipeline would continue east on Mercury Court, passing through various business park and industrial uses before heading south on Industrial Park Driveway.

A trenchless segment would cross Clairemont Mesa Boulevard, and the San Vicente Pipeline would continue south on Ronson Court before heading east on Ronson Road. A trenchless segment would cross SR-163, and then the San Vicente Pipeline would continue again in an open-cut segment east along Lightwave Avenue. The alignment would continue north on Ruffin Road, east on Clairemont Mesa Boulevard and then south on Murphy Canyon Road. At Elanus Canyon, the alignment would head east across a parking lot before crossing I-15 in a trenchless segment and traversing the canyon until rejoining Clairemont Mesa Boulevard. At Santo Road the alignment would head south then east along Tierrasanta Boulevard. A trenchless segment would continue south across the San Diego River and then the alignment would turn east on Mission Gorge Road, traversing the Mission Trails Regional Park. A trenchless segment would cross the SR-52 at West Hills Parkway before continuing east on Carlton Oaks Drive. The alignment would leave the roadway right-of-way for a short segment and then cross Sycamore Canyon via a trenchless crossing before continuing east again within Carlton Oaks Drive.

The San Vicente Pipeline would continue north on Halberns Boulevard, then east on Mast Boulevard with another trenchless segment between two disconnected portions of Mast Boulevard. The alignment would continue east on Riverside Drive and Lakeside Avenue before connecting with Willow Road. From Willow Road the San Vicente Pipeline would turn north on Moreno Avenue, continuing north to the shore of the San Vicente Reservoir.

San Vicente Reservoir Inlet Alignment Alternatives

The San Vicente Reservoir Alternative proposes three alternative reservoir inlet options: (1) a Tunnel Alternative Terminus, (2) an In-Reservoir Alternative Terminus, and (3) a Marina Alternative Terminus.

For the Tunnel Alternative Terminus, an approximately 5,400-linear-foot tunnel would be located at the end of the San Vicente Pipeline. The Tunnel Alternative Terminus would discharge 32 feet above the spillway elevation of the San Vicente Dam (elevation 766 feet) into a reinforced concrete discharge structure and flow down a natural drainage way into the San Vicente Reservoir. Prior to the structure itself, a dechlorination injection point is envisioned to be incorporated to eliminate any residual chlorine in the purified water prior to discharge. Monitoring and injection equipment could be located on an existing City property nearby or at the structure itself, provided regular maintenance can be accommodated.

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The In-Reservoir Alternative Terminus would continue via open trench from Moreno Avenue approximately 6,900 linear feet up the existing Marina access road to the San Vicente Reservoir's western side near the newly constructed Marina. An approximately 10,000-linear-foot subaqueous pipeline constructed of HDPE would then convey water across the San Vicente Reservoir, existing up the far bank where it would connect to the same discharge structure as proposed for the Tunnel Alternative Terminus. The subaqueous pipeline would be weighted to ensure it remains on the San Vicente Reservoir bottom in its final position.

The Marina Alternative Terminus would follow the same alignment as the In-Reservoir Alternative Terminus from the intersection of Vigilante Road and Moreno Avenue along the Marina access road. At the road's high point, near the saddle dam, the pipeline would continue in the access road to the Marina parking area rather than transition to a subaqueous pipeline. The pipeline would continue in the access road that runs along the shoreline and would discharge at the western shore of the San Vicente Reservoir. The Marina Alternative Terminus pipeline would be approximately 8,625 linear feet.

Mission Trails Booster Station

The MTBS will receive purified water pumped from the North City Pump Station via the San Vicente Pipeline. The purified water will be pumped from the MTBS to the San Vicente Reservoir via the San Vicente Pipeline. The MTBS will be located along Mission Gorge Road across two privately owned parcels. The MTBS will have three duty pumps and one standby pump, all of which are 1,000 HP vertical-turbine motor pumps.

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2 EXISTING CONDITIONS

2.1 The Greenhouse Effect

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This “trapping” of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The greenhouse effect is a natural process that contributes to regulating the Earth’s temperature. Without it, the temperature of the Earth would be about 0° Fahrenheit (°F; –18° Celsius (°C)) instead of its current 57°F (15°C) (Qiancheng 1998). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

2.2 Greenhouse Gases

GHGs include, but are not limited to, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), O₃, water vapor, fluorinated gases (hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃)), chlorofluorocarbons (CFCs), and hydrochlorofluorocarbons (HCFCs). Some GHGs, such as CO₂, CH₄, and N₂O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases, such as HFCs, PFCs, and SF₆, which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.¹

Carbon Dioxide. CO₂ is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth’s radiative balance. Natural sources of CO₂ include respiration of bacteria, plants, animals, and fungus; evaporation from oceans, volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO₂ are from the combustion of coal, oil, natural gas, and wood.

¹ The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), the California Air Resources Board’s (CARB’s) Glossary of Terms Used in GHG Inventories (2015), and the U.S. Environmental Protection Agency’s (EPA’s) Glossary of Climate Change Terms (2016).

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Methane. CH₄ is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. Sources of N₂O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and the use of N₂O as a propellant (such as in rockets, racecars, aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic, powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals that are used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, along with HFCs, to the ozone depleting substances. The two main sources of PFCs are primarily aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF₆ is a colorless gas that is soluble in alcohol and ether and slightly soluble in water. SF₆ is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen trifluoride:** NF₃ is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O₃.

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Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential (GWP). Diesel particulate matter emissions are a major source of black carbon and are also toxic air contaminants (TACs) that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board's (CARB's) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014a).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O₃, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O₃, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O₂), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O₃, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

2.2.1 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the

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atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2015).

The Intergovernmental Panel on Climate Change (IPCC) developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons of CO₂ equivalent (MT CO₂E).

The current version of the California Emissions Estimator Model (CalEEMod) (version 2016.3.1) assumes that the GWP for CH₄ is 25 (which means that emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the Project.

2.3 Contributions to Greenhouse Gas Emissions

Per the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2013 (EPA 2015), total U.S. GHG emissions were approximately 6,870.5 million metric tons (MMT) CO₂E in 2014. The primary GHG emitted by human activities in the United States was CO₂, which represented approximately 80.9% of total GHG emissions (5,556.0 MMT CO₂E). The largest source of CO₂, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.7% of CO₂ emissions in 2014 (5,208.2 MMT CO₂E). Total U.S. GHG emissions have increased by 7.4% from 1990 to 2014, and emissions increased from 2013 to 2014 by 1.0% (70.5 MMT CO₂E). Since 1990, U.S. GHG emissions have increased at an average annual rate of 0.3%; however, overall, net emissions in 2014 were 8.6% below 2005 levels (EPA 2015).

According to California's 2000–2014 GHG emissions inventory (2016 edition), California emitted 441.5 MMT CO₂E in 2014, including emissions resulting from out-of-state electrical generation (CARB 2016). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emission source categories and their relative contributions in 2014 are presented in Table 2.3-1.

Table 2.3-1
GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO ₂ E)	Percent of Total ^a
Transportation	159.53	36%
Industrial uses	93.32	21%

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**Table 2.3-1
GHG Emissions Sources in California**

Source Category	Annual GHG Emissions (MMT CO ₂ E)	Percent of Total ^a
Electricity generation ^b	88.24	20%
Residential and commercial uses	38.34	9%
Agriculture	36.11	8%
High global warming potential substances	17.15	4%
Recycling and waste	8.85	2%
Totals	441.54	100%

Source: CARB 2016.

Notes: Emissions reflect the 2014 California GHG inventory.

MMT CO₂E = million metric tons of CO₂ equivalent per year

^a Percentage of total has been rounded, and total may not sum due to rounding.

^b Includes emissions associated with imported electricity, which account for 36.51 MMT CO₂E annually.

During the 2000 to 2014 period, per-capita GHG emissions in California have continued to drop from a peak in 2001 of 13.9 metric tons (MT) per person to 11.4 MT per person in 2014, representing an 18% decrease. In addition, total GHG emissions in 2014 were 2.8 MMT CO₂E less than 2013 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is on track to meet the statewide 2020 target of 431 MMT CO₂E established by Assembly Bill (AB) 32, discussed in the following text (CARB 2016).

2.4 Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report indicated that warming of the climate system is unequivocal and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply. The primary effect of global climate change has been a 0.2°C rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of about 0.2°C (0.36°F) per decade is projected, and there are identifiable signs that global warming could be taking place.

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Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada. By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights. A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California and much of the state's water supply, by 30% to as much as 90% is predicted over the next 100 years (CAT 2010a).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CAT 2010a).

A summary of current and future climate change impacts to resource areas in California, as discussed in *Safeguarding California: Reducing Climate Risk* (NRA 2014), is provided in the following text.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. Some of the specific challenges faced by the agricultural sector and farmers include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availability and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests, and plant diseases; and disruptions to the transportation and energy infrastructure supporting

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agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. Nonetheless, it is predicted that current crop and livestock production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if not managed or mitigated (NRA 2014).

Biodiversity and Habitat. The state’s extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift, and novel combinations of species; pathogens, parasites and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; and threshold effects (i.e., a change in the ecosystem that results in a “tipping point” beyond which irreversible damage or loss has occurred). Habitat restoration, conservation, and resource management across California and through collaborative efforts among public, private, and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species’ ability to relocate as temperature and water availability fluctuate as a result of climate change, based on geographic region.

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex integrated system. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants since power plant cooling is less efficient at higher ambient temperatures. Natural gas infrastructure in coastal California is threatened by sea level rise and extreme storm events (NRA 2014).

Forestry. Forests occupy approximately 33% of California’s 100 million acres and provide key benefits such as wildlife habitat, absorption of CO₂, renewable energy and building materials. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat and decreased carbon absorption. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes, or quickly occupy areas denuded by fire, insect mortality or other climate change effects on vegetation (NRA 2014).

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Ocean and Coastal Ecosystems and Resources. Sea level rise, changing ocean conditions and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities, as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally (NRA 2014).

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the twenty-first century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat related illness as well as exacerbate existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies. Additional health impacts that may be impacted by climate change include cardiovascular disease, vector-borne diseases, mental health impacts, and malnutrition injuries. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality (NRA 2014).

Transportation. Residents of California rely on airports, seaports, public transportation and an extensive roadway network to gain access to destinations, goods and services. While the transportation industry is a source of GHG emissions it is also vulnerable to climate change risks. Particularly, sea level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports, and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety (NRA 2014).

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes, and ecosystems and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to

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earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively impact groundwater reserves and result in increased overdraft and subsidence. Droughts can also negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat (NRA 2014).

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3 REGULATORY SETTING

3.1 Federal Activities

Massachusetts v. EPA. On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the U.S. Environmental Protection Agency (EPA) Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the Clean Air Act (CAA). On December 7, 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The Administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the “endangerment finding.”
- The Administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

Energy Independence and Security Act. On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the Act would do the following, which would aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy standard for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

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Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams/mile of CO₂ in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon (mpg) if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO₂ emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

~~**EPA and NHTSA Joint Final Rule for Vehicle Standards.** On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national project consisting of new standards for light-duty vehicles model years 2012 through 2016. The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA is finalizing the first ever national GHG emissions standards under the CAA, and NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act (EPA 2010). This final rule follows the EPA and Department of Transportation's joint proposal on September 15, 2009, and is the result of~~

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President Obama's May 2009 announcement of a national project to reduce GHG and improve fuel economy (EPA 2011). The final rule became effective on July 6, 2010 (75 FR 25324-25728).

The EPA GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO₂ level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. Together, these standards will cut GHG emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the project. The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers (EPA 2011).

In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (77 FR 62623-63200). These standards will reduce motor vehicle GHG emissions to 163 grams of CO₂ per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through improvements in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards, for model year 2017 to 2021, are projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE project, for model years 2022 to 2025, are projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards have not been finalized due to the statutory requirement that NHTSA set average fuel economy standards not more than five model years at a time. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel cells vehicles.
- Incentives for hybrid technologies for large pickups and for other technologies that achieve high fuel economy levels on large pickups.
- Incentives for natural gas vehicles.
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standards test procedures.

Climate Action Plan. In June 2013, President Obama issued a national Climate Action Plan (Plan) that consisted of a wide variety of executive actions and had three pillars: (1) cut carbon in

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America, (2) prepare the United States for impacts of climate change, and (3) lead international efforts to combat global climate change and prepare for its impacts (EOP 2013).

The Plan outlines 75 goals within the three main pillars:

- ~~1. ***Cut Carbon in America.*** The Plan consists of actions to help cut carbon by deploying clean energy, such as cutting carbon from power plants, promoting renewable energy, and unlocking long term investment in clean energy innovation. In addition, the Plan includes actions designed to help build a twenty first century transportation sector; cut energy waste in homes, businesses, and factories; and reduce other GHG emissions, such as HFCs and methane. The Plan commits to lead in clean energy and energy efficiency at the federal level.~~
- ~~2. ***Prepare the United States for Impacts of Climate Change.*** The Plan consists of actions to help prepare for the impacts of climate change through building stronger and safer communities and infrastructure, supporting climate resilient investments, supporting communities and tribal areas as they prepare for impacts, and boosting resilience of building and infrastructure; protecting the economy and natural resources by identifying vulnerabilities, promoting insurance leadership, conserving land and water resources, managing drought, reducing wildfire risks, and preparing for future floods; and using sound science to manage climate impacts.~~
- ~~3. ***Lead International Efforts.*** The Plan consists of actions to help the United States lead international efforts through working with other countries to take action by enhancing multilateral engagements with major economies, expanding bilateral cooperation with major emerging economies, combating short lived climate pollutants, reducing deforestation and degradation, expanding clean energy use and cutting energy waste, global free trade in environmental goods and services, and phasing out subsidies that encourage wasteful use of fossil fuels and by leading efforts to address climate change through international negotiations.~~

In June 2014, the Center for Climate and Energy Solutions (C2ES) published a 1 year review of progress in implementation of the Plan (C2ES 2014). C2ES found that the administration had made marked progress in its initial implementation. The administration made at least some progress on most of the Plan's 75 goals, and many of the specific tasks outlined had been completed. Notable areas of progress included steps to limit carbon pollution from power plants; improve energy efficiency; reduce CH₄ and HFC emissions; help communities and industry become more resilient to climate change impacts; and end U.S. lending for coal fired power plants overseas.

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~~**U.N. Framework Convention on Climate Change Pledge.** On March 31, 2015, the State Department submitted to the United Nations Framework Convention on Climate Change the U.S. target to cut net GHG emissions. The submission, referred to as an Intended Nationally Determined Contribution, is a formal statement of the U.S. target, announced in China, to reduce emissions by 26%–28% below 2005 levels by 2025, and to make best efforts to reduce by 28% (C2ES 2016).~~

~~The target reflects a planning process that examined opportunities under existing regulatory authorities to reduce emissions in 2025 of all GHGs from all sources in every economic sector. Several U.S. laws, as well as existing and proposed regulations thereunder, are relevant to the implementation of the U.S. target, including the CAA (42 U.S.C. 7401 et seq.), the Energy Policy Act (42 U.S.C. 13201 et seq.), and the Energy Independence and Security Act (42 U.S.C. 17001 et seq.).~~

Clean Power Plan and New Source Performance Standards for Electric Generating Units. On October 23, 2015, EPA published a final rule (effective December 22, 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, EPA published a final rule (effective October 23, 2015) establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. Implementation of the Clean Power Plan has been stayed by the U.S. Supreme Court pending resolution of several lawsuits.

~~**Mandatory Greenhouse Gas Reporting Rule.** On September 22, 2009, EPA published the Final Mandatory Greenhouse Gas Reporting Rule (Reporting Rule) in the Federal Register (74 FR 56260–56373). The Reporting Rule requires reporting of GHG data and other relevant information from fossil fuel and industrial GHG suppliers, vehicle and engine manufacturers, and all facilities that would emit 25,000 MT CO₂e or more per year. Facility owners are required to submit an annual report with detailed calculations of facility GHG emissions on March 31 for emissions from the previous calendar year. The Reporting Rule also mandates recordkeeping and administrative requirements to enable EPA to verify the annual GHG emissions reports.~~

Council on Environmental Quality Guidance. On August 4⁵, 2016, the Council on Environmental Quality (CEQ) released final guidance for federal agencies on considering the

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impacts of GHG emissions in NEPA reviews (CEQ 2016). This guidance supersedes the draft GHG and climate change guidance released by CEQ in 2010 and 2014. The final guidance applies to all proposed federal agency actions, including land and resource management actions. This guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated GHG emissions, and the implications of climate change for the environmental effects of a proposed action. The guidance recommends that agencies quantify a proposed agency action's projected direct and indirect GHG emissions, taking into account available data and GHG quantification tools that are suitable for the proposed agency action. This guidance was withdrawn by the CEQ on April 5, 2017, as published in the Federal Register Volume 82, Number 64, Section 16576 (CEQ 2017) and as directed by Executive Order 13783.

3.2 State of California

State Climate Change Targets

Executive Order (EO) S-3-05. EO S-3-05 (June 2005) established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80% below 1990 levels by 2050. Under EO S-3-05, the California Environmental Protection Agency is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued the 2006 Climate Action Team Report to Governor Schwarzenegger and the Legislature (CAT 2006).

The 2009 Climate Action Team Biennial Report (CAT 2010b) expands on the policy outlined in the 2006 assessment. The 2009 report identifies the need for additional research in several different aspects that affect climate change to support effective climate change strategies. Subsequently, the 2010 Climate Action Team Report to Governor Schwarzenegger and the California Legislature (CAT 2010a) reviews past climate action milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard, a statewide renewable energy standard, and the cap-and-trade program.

AB 32. In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020, representing a reduction of approximately 15% below emissions expected under a “business-as-usual” (BAU) scenario.

CARB has been assigned responsibility for carrying out and developing the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt

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regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 also authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted. These efforts target GHG emission reductions from cars and trucks, electricity production, fuels, and other sources. The full implementation of AB 32 will help mitigate risks associated with climate change while improving energy efficiency, expanding the use of renewable energy resources and cleaner transportation, and reducing waste.

Of relevance to this analysis, in 2007, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO₂E). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California.

Further, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Scoping Plan) in accordance with Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The 2020 emissions limit was set at 427 MMT of CO₂E (CARB 2008). The Scoping Plan establishes an overall framework for a suite of measures that will be adopted to sharply reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.

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5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "Business-As-Usual" (BAU)). For example, in further explaining CARB's BAU methodology, CARB assumed that all new electricity generation would be supplied by natural gas plants; no further regulatory action would impact vehicle fuel efficiency; and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions (CARB 2011a). When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewable Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

Most recently, in 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update; CARB 2014b). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050" (CARB 2014b). Those six areas are: (1) energy, (2) transportation (vehicles/equipment, sustainable communities, housing,

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fuels, and infrastructure), (3) agriculture, (4) water, (5) waste management, and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of Executive Order S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the First Update, CARB has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO₂E) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions. The update also recommends that a statewide mid-term target and mid-term and long-term sector targets be established toward meeting the 2050 goal established by EO S-3-05 (i.e., reduce California's GHG emissions to 80% below 1990 levels), although no specific recommendations are made.

On January 20, 2017, CARB released The 2017 Climate Change Scoping Plan Update (Second Update) for public review and comment (CARB 2017). This update to the Scoping Plan proposes CARB's strategy for achieving the states 2030 GHG target, including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting super pollutants from the Short Lived Climate Pollutants Strategy, acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy and Transportation sectors to inform development of the 2030 Scoping Plan Update. When discussing project-level GHG emissions reduction actions and thresholds, the Second Update states "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. And the inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." The deadline to submit comments on the Second Update was March 6, 2017. It is expected that the Second Update will be heard by CARB at the April 27 and 28, 2017 CARB meeting.

EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of

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reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO₂E. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry were required to prepare GHG reduction plans by September 2015, followed by a report on action taken in relation to these plans in June 2016. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction threshold. It is important to note that EO B-30-15 was not adopted by a public agency through a public review process that requires analysis pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15064.4, and that it has not been subsequently validated by a statute as an official GHG reduction target of California. EO B-30-15 itself states it is "not intended to create, and does not create, any rights of benefits, whether substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person."

Senate Bill (SB) 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

EO B-18-12. EO B-18-12 (April 2012) directs state agencies, departments, and other entities under the governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10% by 2015 and 20% by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing state buildings for reducing grid-based energy purchases and water use.

SB 605. SB 605 (September 2014) requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the

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climate that is more potent than that of carbon dioxide” (SB 605). SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer co-benefits by improving water quality or reducing other criteria air pollutants that impact community health and benefit disadvantaged communities. The Proposed Short-Lived Climate Pollution Reduction Strategy released by CARB in April 2016 focuses on CH₄, black carbon, and fluorinated gases, particularly HFCs, as important short-lived climate pollutants. The strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California’s building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Commission (CEC) is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The current Title 24 standards are the 2013 standards, which became effective on July 1, 2014. Buildings constructed in accordance with the 2013 standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards (CEC 2014).

The 2016 Title 24 building energy efficiency standards, which became effective January 1, 2017, will further reduce energy used and associated GHG emissions. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015). Although the North City Project would be required to comply with 2016 Title 24 standards because its building construction phase would commence after January 1, 2017, this analysis conservatively does not quantify the increase energy efficiency associated with the more stringent 2016 Title 24 standards.

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Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), commonly referred to as CALGreen, establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- 65% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations.
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Public Utilities Commission (CPUC), CEC, and CARB also have a shared, established goal of achieving zero net energy for new construction in California. The key policy

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timelines include: (1) all new residential construction in California will be zero net energy by 2020, and (2) all new commercial construction in California will be zero net energy by 2030.²

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwashers; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains the following three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

Mobile Sources

AB 1493. In a response to the transportation sector accounting for more than half of California's CO₂ emissions, AB 1493 (Pavley) was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

EO S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂E grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of

² See CPUC's California's Zero Net Energy Policies and Initiatives (CPUC 2013). It is expected that achievement of the zero net energy goal will occur via revisions to the Title 24 standards.

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biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

SB 375. SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan (RTP). The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for the San Diego Association of Governments (SANDAG) are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011 (SANDAG 2011). In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. In November 2014, Division One of the Fourth District Court of Appeal issued its decision in *Cleveland National Forest Foundation v. SANDAG*, Case No. D063288. In its decision, the Fourth District held that SANDAG abused its discretion when it certified the environmental impact report (EIR) for the 2050 RTP/SCS because it did not adequately analyze and mitigate GHG emission levels after year 2020. The 2050 RTP/SCS

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EIR complied with CARB's AB 32-related GHG reduction target through 2020, but the EIR found that plan-related emissions would substantially increase after 2020 and through 2050. The majority of the Fourth District in the *Cleveland National* decision found SANDAG's EIR deficient because, although the EIR used three significance thresholds authorized by CEQA Guidelines, Section 15064.4(b), it did not assess the 2050 RTP/SCS's consistency with the 2050 GHG emissions goal identified in EO S-03-05, which the majority construed as "state climate policy." The Fourth District did not require the set aside of SANDAG's 2050 RTP/SCS itself. In March 2015, the California Supreme Court granted SANDAG's petition for review of the Fourth District's decision (Case No. S223603), and the matter currently is pending before the state's highest court.

Although the EIR for SANDAG's 2050 RTP/SCS is still pending before the California Supreme Court, SANDAG recently adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines. More specifically, in October 2015, SANDAG adopted San Diego Forward: The Regional Plan. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015).

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025, cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The zero-emission vehicle program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emission vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years. The Clean Fuels Outlet regulation will ensure that fuels such as electricity and hydrogen are available to meet the fueling needs of the new advanced technology vehicles as they come to the market.

EO B-16-12. EO B-16-12 (March 2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution of zero-emission vehicles. This EO also sets a long-term target of reaching 1.5 million zero-emission vehicles on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050.

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Renewable Energy and Energy Procurement

SB 1078. SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010 (see SB 107, EOs S-14-08, and S-21-09.)

SB 1368. In September 2006, Governor Schwarzenegger signed SB 1368, which requires the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the CPUC. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

EO S-14-08. EO S-14-08 (November 2008) focuses on the contribution of renewable energy sources to meet the electrical needs of California while reducing the GHG emissions from the electrical sector. This EO requires that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. Furthermore, the EO directs state agencies to take appropriate actions to facilitate reaching this target. The California Natural Resources Agency, through collaboration with the CEC and California Department of Fish and Wildlife (formerly the California Department of Fish and Game), is directed to lead this effort. Pursuant to a Memorandum of Understanding between the CEC and California Department of Fish and Wildlife regarding creating the Renewable Energy Action Team, these agencies will create a “one-stop” process for permitting renewable energy power plants.

EO S-21-09. EO S-21-09 (September 2009) directed CARB to adopt a regulation consistent with the goal of EO S-14-08 by July 31, 2010. CARB is further directed to work with the CPUC and CEC to ensure that the regulation builds upon the RPS program and is applicable to investor-owned utilities, publicly owned utilities, direct access providers, and community choice providers. Under this order, CARB is to give the highest priority to those renewable resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health and can be developed the most quickly in support of reliable, efficient, cost-effective electricity system operations. On September 23, 2010, CARB adopted regulations to implement a Renewable Electricity Standard, which would achieve the goal of the EO with the following intermediate and final goals: 20% for 2012–2014, 24% for 2015–2017, 28% for 2018–2019, and 33% for 2020 and beyond. Under the regulation, wind; solar; geothermal; small

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hydroelectric; biomass; ocean wave, thermal, and tidal; landfill and digester gas; and biodiesel would be considered sources of renewable energy. The regulation would apply to investor-owned utilities and public (municipal) utilities. The Renewable Electricity Standard did not go into effect as SB X1 2 superseded it as discussed below.

SB X1 2. SB X1 2 (April 2011) expanded the RPS by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local, publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local, publicly owned electric utilities establish the same targets, and the governing boards would be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

SB 350. SB 350 (October 2015) expands the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-

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29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Solid Waste

AB 939 and AB 341. In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code Section 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (Chapter 476, Statutes of 2011 (Chesbro)) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle conducted several general stakeholder workshops and several focused workshops and in August 2015 published a discussion document titled AB 341 Report to the Legislature, which identifies five priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020, legislative and regulatory recommendations, and an evaluation of program effectiveness.

Increasing the amount of commercial solid waste that is recycled, reused, or composted will reduce GHG emissions primarily by (1) reducing the energy requirements associated with the extraction, harvest, and processing of raw materials; and (2) using recyclable materials that require less energy than raw materials to manufacture finished products (CalRecycle 2015). Increased diversion of organic materials (green and food waste) will also reduce GHG emissions (CO₂ and CH₄) resulting from decomposition in landfills by redirecting this material to processes that use the solid waste material to produce vehicle fuels, heat, electricity, or compost.

Other State Regulations and Goals

EO S-13-08. EO Order S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directed the California Natural Resources Agency, in cooperation with the California Department of Water Resources, CEC, California's

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coastal management agencies, and the Ocean Protection Council, to request that the National Academy of Sciences prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other state agencies, were required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess within 90 days of issuance of the EO the vulnerability of the state's transportation systems to sea-level rise. The Governor's Office of Planning and Research and the California Natural Resources Agency are required to provide land use planning guidance related to sea-level rise and other climate change impacts. The EO also required the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. A discussion draft adaptation strategies report was released in August 2009, and the final 2009 California Climate Adaptation Strategy report was issued in December 2009 (NRA 2009). An update to the 2009 report, *Safeguarding California: Reducing Climate Risk*, was issued in July 2014 (NRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water.

2015 State of the State Address. In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals which would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

2016 State of the State Address. In his January 2016 address, Governor Brown established a statewide goal to bring per-capita GHG emissions down to 2 tons per person, which reflects the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 MOU; OPR 2016) to limit global warming to less than 2°C by 2050. The Under 2 MOU agreement pursues emission reductions of 80% to 95% below 1990 levels by 2050 and/or reach a per-capita annual emissions goal of less than 2 MT by 2050. A total of 135 jurisdictions representing 32 countries and 6 continents, including California, have signed or endorsed the Under 2 MOU (OPR 2016).

Local Plans

City of San Diego General Plan

The State of California requires cities and counties to prepare and adopt a general plan to set out a long-range vision and comprehensive policy framework for its future. The state also mandates that the plan be updated periodically to ensure relevance and utility. The City of San

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Diego General Plan 2008 (General Plan) was unanimously adopted by the City Council on March 10, 2008, with additional amendments approved in December 2010, January 2012, and June 2015. The General Plan builds upon many of the goals and strategies of the former 1979 General Plan, in addition to offering new policy direction in the areas of urban form, neighborhood character, historic preservation, public facilities, recreation, conservation, mobility, housing affordability, economic prosperity, and equitable development. It recognizes and explains the critical role of the community planning project as the vehicle to tailor the City of Villages strategy for each neighborhood. It also outlines the plan amendment process, and other implementation strategies, and considers the continued growth of the City beyond the year 2020 (City of San Diego 2015a).

Conservation Element. The Conservation Element contains policies to guide the conservation of resources that are fundamental components of San Diego’s environment, that help define the City’s identity, and that are relied upon for continued economic prosperity. The purpose of this element is to help the City become an international model of sustainable development and conservation and to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City’s identity, contribute to its economy, and improve its quality of life.

The City has also adopted the following General Plan Conservation Element policies (City of San Diego 2008) related to climate change:

- **CE-A.2.** Reduce the City’s carbon footprint. Develop and adopt new or amended regulations, projects, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
 - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
 - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
 - Improve energy efficiency, especially in the transportation sector and buildings and appliances;
 - Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;
 - Reduce waste by improving management and recycling projects;
 - Plan for water supply and emergency reserves.

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- **CE-A.8.** Reduce construction and demolition waste in accordance with Public Facilities Element, Policy PF-1.2, or by renovating or adding on to existing buildings, rather than constructing new buildings.
- **CE-A.9.** Reuse building materials, use materials that have recycled content, or use materials that are derived from sustainable or rapidly renewable sources to the extent possible, through factors including:
 - Scheduling time for deconstruction and recycling activities to take place during project demolition and construction phases;
 - Using life cycle costing in decision-making for materials and construction techniques. Life cycle costing analyzes the costs and benefits over the life of a particular product, technology, or system.
- **CE-F.3.** Continue to use methane as an energy source from inactive and closed landfills.
- **CE-I.4.** Maintain and promote water conservation and waste diversion projects to conserve energy.
- **CE-I.5.** Support the installation of photovoltaic panels, and other forms of renewable energy production.
 - Seek funding to incorporate renewable energy alternatives in public buildings.
 - Promote the use and installation of renewable energy alternatives in new and existing development.
- **CE-I.10.** Use renewable energy sources to generate energy to the extent feasible.

City of San Diego Climate Action Plan

On January 29, 2002, the San Diego City Council unanimously approved the San Diego Sustainable Community Program. Actions identified include:

1. Participation in the Cities for Climate Protection program coordinated through the International Council of Local Environmental Initiatives;
2. Establishment of a 15% GHG reduction goal set for 2010, using 1990 as a baseline; and
3. Direction to use the recommendations of a scientific Ad Hoc Advisory Committee as a means to improve the GHG Emission Reduction Action Plan within the City organization and to identify additional community actions.

In 2005, the City released a Climate Protection Action Plan. This report includes many of the recommendations provided by the Ad Hoc Advisory Committee and City staff. By implementing these recommendations, the City could directly address the challenges relating to

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mitigation for state and federal ozone standards nonattainment (with associated health benefits) and enhanced economic prosperity, specifically related to the tourism and agricultural sectors.

The Climate Protection Action Plan evaluated citywide GHG emissions, particularly three contentions: (1) the GHG projection in 2010 resulting from no action taken to curb emissions; (2) the GHG emission reductions due to City of San Diego actions implemented between 1990 and 2003; and, (3) the GHG reductions needed by 2010 to achieve 15% reduction. The Climate Protection Action Plan does not recommend or require specific strategies or measures for projects within the City to reduce emissions.

In December 2015, the City adopted its final Climate Action Plan (CAP) (City of San Diego 2015b). A Program EIR was prepared for the City's Draft CAP, which was certified in December 2015. With implementation of the CAP, the City aims to reduce emissions 15% below the baseline to approximately 11.1 MMT CO₂E by 2020, 40% below the baseline to approximately 7.8 MMT CO₂E by 2030, and 50% below the baseline to approximately 6.5 MMT CO₂E by 2035. It is anticipated that the City would exceed its reduction target by 1.3 MMT CO₂E in 2020, 176,528 MT CO₂E in 2030, and 127,135 MT CO₂E in 2035 with implementation of the CAP. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and five local strategies with associated action steps for target attainment. The City has identified the following five strategies to reduce GHG emissions to achieve the 2020 and 2035 targets:

1. Energy and water efficient buildings;
2. Clean and renewable energy;
3. Bicycling, walking, transit, and land use;
4. Zero waste (gas and waste management); and
5. Climate resiliency.

Implementation of the CAP is divided into three actions:

- Early Actions (Adoption of the CAP–December 31, 2017)
- Mid-Term Actions (January 1, 2018–December 31, 2020)
- Longer-Term Actions (2021–2035)

The CAP contains five chapters: Background, Reducing Emissions, Implementation and Monitoring, Social Equity and Job Creation, and Adaptation. The 2015 CAP demonstrates to San Diego businesses and residents that the City acknowledges the existing and potential impacts of a changing climate and is committed to keeping it in the forefront of decision-making. Successful

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implementation of the CAP will: (1) prepare for anticipated climate change impacts in the coming decades, (2) help the State of California achieve its reduction target by contributing the City's fair share of GHG reductions, and (3) have a positive impact on the regional economy.

Through 2020, the CAP meets the requirements set forth in CEQA Guidelines Section 15183.5, whereby a lead agency (e.g., the City of San Diego) may analyze and mitigate the significant effects of GHG emissions at a programmatic level, such as in a general plan, a long-range development plan, or a separate plan to reduce GHG emissions.

On July 12, 2016, The City amended the CAP to include a Consistency Review Checklist, which is intended to provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to CEQA. The checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

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4 THRESHOLDS OF SIGNIFICANCE

The California Natural Resources Agency, through its December 2009 amendments to the CEQA Guidelines (14 CCR 15000 et seq.), and the City of San Diego, through its interim guidance for assessment of GHG emissions, provide a framework for the evaluation of the GHG emissions associated with construction and operation of the Project components. The state's and City's guidance are discussed in the following sections.

4.1 State of California

The State of California has developed guidelines to address the significance of climate change impacts based on Appendix G of the CEQA Guidelines, which provides guidance that a project would have a significant environmental impact if it would:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
1. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Neither the State of California nor the San Diego Air Pollution Control District (SDAPCD) has adopted emission-based thresholds for GHG emissions under CEQA. The Office of Planning and Research's (OPR's) Technical Advisory titled CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates in the third bullet item on page 6 that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice."

4.2 City of San Diego

The City of San Diego's latest update to the CEQA Significance Determination Thresholds document in July 2016 added a GHG emissions threshold section. Pursuant to CEQA Guidelines Sections 15183.5(b), 15064(h)(3), and 15130(d), the City may determine that a project's incremental contribution to a cumulative GHG effect is not cumulatively considerable if the project complies with the requirements of a previously adopted GHG emission reduction plan.

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CEQA Guidelines Section 15183.5(b)(1)(A-F) specifically provides that a GHG emissions reduction plan should:

- A. Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- B. Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
- C. Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- D. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- E. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- F. Be adopted in a public process following environmental review.

An environmental document that relies on a GHG emissions reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project (CEQA Guidelines Section 15183.5(b)(2)).

The City's CAP was adopted by the City Council on December 15, 2015. The CAP quantifies existing GHG emissions as well as projected emissions for the years 2020, 2030, and 2035 resulting from activities within the City's jurisdiction. The CAP also identifies City target emissions levels, below which the citywide GHG impacts would be less than significant. The CAP and the accompanying certified Final EIR also identify and analyze the GHG emissions that would result from the bBAU scenario for the years 2020, 2030, and 2035. The CAP includes a monitoring and reporting program to ensure its progress toward achieving the specified GHG emissions reductions, and specifies 17 actions that if implemented, would achieve the specified GHG emissions reductions targets. The CAP was adopted in a public process following certification of the Final EIR. Subsequent to the adoption of the CAP, the City has also established additional specific measures that if implemented on a project-by-project basis, would further ensure that the City as a whole achieves the specified GHG emissions reduction targets in the CAP.

The CAP has been developed in response to state legislation and policies that are aimed at reducing California's GHG emissions. Consistent with AB 32 and the CARB Scoping Plan, the CAP sets a GHG target for 2020 equivalent to 15% below the City's 2010 baseline emissions to ensure that it meets its proportional share of the 2020 AB 32 reductions. For 2035, the CAP

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sets a GHG target equivalent to a 50% reduction from baseline emissions to ensure it is on the trajectory toward achieving its proportional share of the 2050 state target identified in EO S-3-05. The 2035 target also ensures that the City would be consistent with the 2030 state target identified in EO B-30-15. Since CARB has not provided guidance on a specific reduction target for local governments to use for 2030 and 2050, it was determined that a 50% reduction from baseline emissions by 2035 would ensure that the City achieved a proportional share of the statewide GHG reductions. In terms of consistency with EOs S-3-05 and B-30-15, the CAP's 2035 target provides a conservative target toward achieving the statewide reductions. If CARB provides new guidance on how cities should address the 2030 targets, the City will adjust the CAP accordingly.

Under the City's CEQA Thresholds, the method for determining significance for project-level environmental documents is through the CAP Consistency Checklist (City of San Diego 2015b). The CAP Consistency Checklist, adopted July 12, 2016, is the primary document used by the City of San Diego to ensure project-by-project consistency with the underlying assumptions in the CAP and that the City would achieve its emissions reduction targets identified in the CAP. The CAP Checklist includes a three-step process to determine project consistency (City of San Diego 2015b). Step 1 consists of an evaluation to determine the project's consistency with existing General Plan, Community Plan, and zoning designations for the site. If the project is able to answer "yes" to Step 1 and demonstrate the project would be consistent with existing General Plan, Community Plan, and zoning designations for the site, or the project can demonstrate consistency with existing land uses by comparing the North City Project's GHG emissions with those that would be generated under existing land uses, then the project may proceed to Step 2. If the project must answer "no" to Step 1, then the project would be deemed inconsistent with the CAP, and GHG impacts as identified under CEQA would be considered significant and unavoidable.

Step 2 includes the list of measures each project would be required to implement. Regardless of whether the project would answer "yes" or "no" to Step 1, implementation of the measures listed in Step 2 would be required for all projects, if applicable.

Step 3 would only be applicable for projects that would not be consistent with existing land use designations and would not be consistent with planned site land use GHG emissions, but that would be located in a Transit Priority Area (TPA) as defined by the City's Development Services Department. In accordance with SB 743, a TPA is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations (City of San Diego 2016b). Appendix B, "Transit Priority Areas per SB 743," of the CAP includes a map of TPAs as designated by the City. The TPAs map is based on the adopted SANDAG San Diego Forward Regional Plan.

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4.3 NEPA Considerations

The Bureau of Reclamation considers the consistency of a proposed project with federal guidance concerning the evaluation and reduction of GHG emissions. There are no federal significance criteria established for GHG emissions; therefore, the analysis contained herein is for disclosure purposes only with respect to NEPA; however, CEQ recommends evaluating an action in several contexts and the severity of the impact (CEQ 2016). Additionally, based on CEQ recommendation, a project would result in a significant impact if it would exacerbate the adverse effects of climate change or result in a substantial increase in exposure to these effects. Accordingly, the Mandatory Greenhouse Gas Reporting Rule threshold of 25,000 MT CO₂E per year is used as a level at which potentially adverse effects would occur.

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5 IMPACTS

5.1 Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment

5.1.1 Construction Impacts

5.1.1.1 General Approach and Methodology

GHG emissions would be associated with the construction phase of the North City Project components through use of construction equipment and vehicle trips. Emissions of CO₂ were estimated using CalEEMod, Version 2016.3.1, available online (www.caleemod.com). For the purposes of modeling, it was assumed that construction of Project components would commence in November 2018 and final facilities may come online as late as 2021. It is anticipated that the 30 MGD “buildout” of the Project would be completed during this time.

Table 5.1-1 provides the construction timeline and potential phasing of the components that would come online to achieve the target milestones. The construction schedule has been developed based on available information provided by the City, typical construction practices, and best engineering judgment. Construction phasing is intended to represent a schedule of anticipated activities for use in estimating potential Project-generated construction emissions.

**Table 5.1-1
North City Construction Phasing Assumptions**

Project Component	Construction Start Date	Construction End Date
<i>Project Components Common to Alternatives</i>		
NCWRP Expansion	10/1/2018	12/6/2021
NCPWF Influent Pump Station	1/7/2019	10/21/2021
Morena Pump Station and Pipelines	4/2/2019	10/7/2021
MBC Improvements	4/24/2019	10/20/2021
North City Pump Station	5/21/2019	11/22/2021
NCPWF	10/1/2018	11/4/2021
North City Renewable Energy Facility	3/2/2020	12/5/2021
Landfill Gas Pipeline	3/2/2020	10/5/2021
<i>Miramar Reservoir Alternative</i>		
North City Pipeline	11/14/2018	10/22/2021
Dechlorination Facility	1/7/2019	10/22/2021
Miramar WTP Improvements	7/24/2020	9/21/2021
<i>San Vicente Reservoir Alternative</i>		
San Vicente Pipeline	12/3/2018	5/18/2021
Mission Trails Booster Station	5/9/2019	9/13/2021

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Equipment mix for construction of the North City Project was provided by the Project applicant. The equipment mix assumptions were based on Project design documents, review of related projects conducted in the Southern California area, and CalEEMod default equipment, where appropriate. The equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it is generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week. Default assumptions provided in CalEEMod were utilized to determine worker trips for each potential construction phase during pipeline, pump station, and facility construction. Generally, one worker per piece of construction equipment, a foreman, and several additional workers would be anticipated on a daily basis. Additionally, it was assumed that approximately two vendor trucks per day would be required for general material deliveries, and approximately five haul trucks per day would be required for backfill/slurry deliveries and soil export. The default CalEEMod trip distance for construction vehicles was assumed, which was a one-way distance of 10.8 miles for worker trips, 7.3 miles for vendor trips, and 20 miles for haul trips. To conservatively estimate potential daily emissions, it was assumed pipelines and force main facilities would be constructed simultaneously with other construction components including pump stations and treatment facilities.

Pipelines

Pipeline construction would require both open-trench construction and trenchless tunneling depending on the location of the pipeline to be installed. A description of construction activities and equipment associated with each of these methods is provided.

Open Trench

Open-trench construction would involve an open trench to be dug for the direct installation of pipeline. The sequence of activities for open-trench pipeline construction would typically commence with trenching and excavation, followed by pipe installation and covering of the installed pipe, and concluding with paving the pipeline corridor area of disturbance. For the purposes of quantifying emissions from daily construction activity associated with pipeline construction, it was assumed that each contractor would complete construction of approximately 75 linear feet of pipeline per day; however, daily activity and linear feet installed would vary depending on field conditions, site/easement access, and other factors associated with continual site location changes. Assuming concurrent construction by two contractors, approximately 200 to 150 linear feet of pipeline installation could occur each day depending on the component under construction and total linear feet of pipeline or conveyance infrastructure to be constructed over a given period.³ For the purposes of modeling, it was assumed that paving activities would

³ Linear feet per day assumptions based on typical construction practices for pipeline construction, and review of related projects.

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occur for approximately 2 weeks every 6 months over a given construction period throughout the pipeline installation phases. It was also assumed that after pipe installation is completed, a portion of the paved roads would require light grading and reapplication of pavement, which was assumed to occur during the last month of pipeline construction for each Project component. In addition, for the purposes of estimating emissions, it was assumed that typical open trench construction phasing would occur as follows:

- Trenching and excavation would be ongoing throughout pipeline construction phase.
- Pipe installation would occur intermittently as trenching and excavation activities occur throughout the pipeline construction phase.
- Paving, intermittent, would occur for approximately 2 weeks every 6 months for duration of pipeline construction.
- Final paving would occur for 1 month at the end of the construction phase.

Due to the length of the alignment, it was assumed that two contractors would potentially be required for construction of the North City Project.

Trenchless Tunneling

Trenchless tunneling would involve the excavation of a portal at either end of the pipeline segment to be installed, where the pipeline would be fed through and connected. The sequence of activities for trenchless tunneling construction would typically commence with site preparation of the first portal location followed by excavation of the portal. Excavation of the tunnel would occur following portal excavation. It is assumed all excavated material would be hauled off site. The second portal location would then be prepped and excavated. Installation of pipeline would occur once the tunnel has been fully excavated and portals are clear. The pipeline would then be connected, and the portal sites would be restored to their pre-construction condition. Trenchless tunneling practices would be employed for the specific segments of other pipeline alignments such as freeway or waterway crossings or within avoidance areas where ground disturbance (i.e., an open trench) is not permitted such as wetlands or other environmentally sensitive locations.

For the purposes of estimating emissions, it was assumed that typical construction phasing would occur as follows during tunneling:

- Site preparation at first portal site
- Excavation of first portal site
- Tunnel excavation
- Site preparation at second portal site

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- Excavation of second portal site
- Pipeline installation
- Pipeline connection
- Site restoration

Pump Stations and Treatment Facilities

For the purposes of estimating emissions, construction timelines vary based on the type of feature and are summarized in the following tables.

5.2 Common Project Components

5.2.1 North City Water Reclamation Plant Expansion

To ensure the 30 MGD of pure water can be produced at the NCPWF, the NCWRP will undergo an expansion of the primary, secondary, and tertiary treatment processes, as well as the corresponding support systems. The proposed construction equipment for the NCWRP Expansion is shown in Table 5.2-1.

**Table 5.2-1
Construction Scenario Assumptions – NCWRP Expansion**

Construction Phase (Duration)	One-way Vehicle Trips			Equipment		
	<i>Average Daily Worker Trips</i>	<i>Average Daily Vendor Truck Trips</i>	<i>Total Haul Truck Trips</i>	<i>Equipment Type</i>	<i>Quantity</i>	<i>Usage Hours</i>
Demolition (107 days)	16	0	0	Saws	1	8
				Dumpers/Tenders	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
Grading/trenching (150 days)	16	0	1,009	Dumpers/Tenders	2	8
				Excavators	2	8
				Plate Compactors	2	8
Building construction (428 days)	102	40	0	Cement and Mortar Mixers	1	8
				Cranes	1	8
				Pumps	1	8
				Tractors/loaders/backhoes	1	8
				Welders	1	8
Paving (107 days)	16	0	0	Dumpers/Tenders	1	8
				Pavers	1	8
				Rollers	1	8

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**Table 5.2-1
Construction Scenario Assumptions – NCWRP Expansion**

Construction Phase (Duration)	One-way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Architectural coating (107 days)	20	0	0	Air compressors	1	8
				Cranes	1	8

Source: See Appendix A for details.

5.2.2 North City Pure Water Facility Influent Pump Station

The NCPWF Influent Pump Station will be constructed at the NCWRP and will convey tertiary effluent from the NCWRP to the NCPWF. The NCPWF Influent Pump Station will have a maximum capacity of 42.5 MGD to enable the NCPWF to produce 30 MGD of purified water after accounting for recycle and other streams. The proposed construction equipment for the NCPWF Influent Pump Station and pipelines are shown in Table 5.2-2.

**Table 5.2-2
Construction Scenario Assumptions – NCPWF Influent Pump Station**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition (21 days)	10	0	0	Saws	1	8
				Dumpers/Tenders	2	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
Grading (97 days)	10	0	63	Dumpers/Tenders	2	8
				Excavators	2	8
				Plate Compactors	2	8
Building construction (260 days)	100	6	0	Cement and Mortar Mixers	1	8
				Cranes	1	8
				Pumps	1	8
				Tractors/loaders/backhoes	1	8
				Welders	1	8
Paving (80 days)	18	0	0	Dumpers/Tenders	1	8
				Pavers	1	8
				Rollers	1	8
Architectural coating (14 days)	6	0	0	Air compressors	1	8
				Cranes	2	8

Source: See Appendix A for details.

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5.2.3 Morena Pump Station and Pipelines

Morena Pump Station

The Morena Pump Station and Wastewater Forcemain are proposed to deliver maximum flow of 37.7 MGD of raw wastewater to the NCWRP, expanding the NCWRP’s production capacity from 30 MGD to 54 MGD in dry weather conditions. The assumed construction equipment for the Morena Pump Station is shown in Table 5.2-3.

**Table 5.2-3
Construction Scenario Assumptions – Morena Pump Station**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition (45 days)	14	0	0	Saws	1	8
				Dumpers/Tenders	2	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
Grading/trenching (90 days)	16	0	400	Dumpers/Tenders	2	8
				Excavators	2	8
				Plate Compactors	2	8
Building construction (180 days)	16	2	0	Cement and Mortar Mixers	1	8
				Cranes	1	8
				Pumps	1	8
				Tractors/loaders/backhoes	1	8
				Welders	1	8
Paving (14 days)	16	0	0	Paving Equipment	1	8
				Pavers	1	8
				Rollers	1	8
Architectural coating (7 days)	8	0	0	Air compressors	1	8
				Cranes	1	8

Source: See Appendix A for details.

Morena Pipelines

Off-site infrastructure of the pump station facility, excluding the Wastewater Forcemain and Brine/Centrates Line, consists of a storm drainage line, pump station inflow piping, overflow piping, and associated subgrade diversion structures. The proposed Morena Pipelines alignment and type of construction is shown in Table 5.2-4. The proposed construction equipment for the trenched portion of the Morena Pipelines is shown in Table 5.2-5, and the construction equipment for the tunneling sections of the Morena Pipelines is shown in Table 5.2-6.

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**Table 5.2-4
Morena Pipeline Alignment Summary**

Segment	Horizontal Distance (LF)	Open Cut (LF)	Trenchless or Other Method (LF)
48-in forcemain and 24-in brine/centrate line	50,890	50,890	—
Tecolote Road Bridge and Creek	395	—	395
San Clemente Canyon Bridge	510	—	510
SR-52	1,510	—	1,510
MTS Railroad Tracks	300	—	300
Judicial Drive Intersection	290	—	290
I-805	1,100	—	1,100
<i>Trenchless Subtotal</i>	4,105	—	4,105
Total	54,995 (10.4 miles)	50,890	4,105

Notes: LF = linear feet; in = inch

**Table 5.2-5
Construction Scenario Assumptions – Morena Pipelines Trenched Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Trenching (200 days)	26	0	5,154	Excavators	2	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/Backhoes	4	8
				Trenchers	2	8
Building construction (200 days)	16	2	0	Forklifts	2	8
				Cranes	2	8
				Tractors/Loaders/Backhoes	2	8
Paving (200 days)	16	0	0	Paving Equipment	2	8
				Pavers	2	8
				Rollers	2	8

Source: See Appendix A for details.

**Table 5.2-6
Construction Scenario Assumptions – Morena Pipelines Trenchless Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation at Portal Sites (25 days)	8	0	0	Graders	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	8

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**Table 5.2-6
Construction Scenario Assumptions – Morena Pipelines Trenchless Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Portal Excavation (150 days)	16	0	0	Crushing Equipment	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	1	8
				Trenchers	1	8
Tunnel Excavation (190 days)	26	2	0	Crushing Equipment	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	1	8
				Trenchers	1	8
Site Restoration (150 days)	4	0	0	Tractors/Loaders/Backhoes	1	8

Source: See Appendix A for details.

5.2.4 Metro Biosolids Center Improvements

Diverting additional wastewater flows to the NCWRP ultimately changes the relative contribution of biosolids received at the MBC from the NCWRP and the Point Loma WWTP. The anticipated construction details for the MBC improvements are shown in Table 5.2-7.

**Table 5.2-7
Construction Scenario Assumptions – MBC Improvements**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition (15 days)	10	0	0	Concrete/Industrial Saws	1	8
				Dumpers/Tenders	2	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
Grading (30 days)	10	0	0	Dumpers/Tenders	2	8
				Excavators	2	8
				Plate Compactors	2	8
Construction (200 days)	16	2	0	Cement and Mortar Mixers	1	8
				Cranes	1	8
				Pumps	1	8
				Tractors/Loaders/Backhoes	1	8
				Welders	1	8

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**Table 5.2-7
Construction Scenario Assumptions – MBC Improvements**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Paving (7 days)	18	2	0	Pavers	1	8
				Paving Equipment	1	8
				Rollers	1	8

Source: See Appendix A for details.

5.2.5 North City Pump Station

The North City Pump Station will be constructed on the same site as the NCPWF. Any grading associated with the NCPWF will be captured in that phase. The anticipated construction equipment for the North City Pump Station is shown in Table 5.2-8.

**Table 5.2-8
Construction Scenario Assumptions – North City Pump Station**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Grading (15 days)	14	0	0	Excavators	1	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/Backhoes	2	8
Trenching (50 days)	26	0	0	Concrete/Industrial Saws	1	8
				Excavators	2	8
				Off-Highway Trucks	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8
				Welders	2	8
Building construction (230 days)	26	2	0	Aerial Lifts	2	8
				Cranes	1	8
				Forklifts	2	8
				Rollers	1	8
				Tractors/Loaders/Backhoes	1	8
				Welders	2	8
Paving (5 days)	18	0	0	Crushing/Proc. Equipment	1	8
				Off-Highway Trucks	1	8
				Pavers	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8

Source: See Appendix A for details.

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5.2.6 North City Renewable Energy Facility and Landfill Gas Pipeline

The proposed renewable energy facility will require construction of a main building for the six ICEs, a control equipment building, and storage building. The Project would also require the installation of a new 12-inch-diameter gas line from the City’s Miramar Landfill to the NCWRP. The proposed construction equipment for the new renewable energy facility phase of the Project is shown in Table 5.2-9, and the construction scenario assumptions for the LFG Pipeline trenched and trenchless segments are provided in Tables 5.2-10 and 5.2-11.

**Table 5.2-9
Construction Scenario Assumptions – North City Renewable Energy Facility**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition (10 days)	10	0	14	Concrete/Industrial Saws	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	2	8
Grading (10 days)	10	0	0	Concrete/Industrial Saws	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	2	8
Building Construction (300 days)	8	4	0	Cranes	1	8
				Forklifts	2	8
				Tractors/Loaders/Backhoes	2	8
Paving (10 days)	18	0	0	Cement and Mortar Mixers	4	8
				Pavers	1	8
				Rollers	1	8
				Tractors/Loaders/Backhoes	1	8

Source: See Appendix A for details.

**Table 5.2-10
Construction Scenario Assumptions – LFG Pipeline Trenched Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Trenching (135 days)	26	0	50	Excavators	2	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/Backhoes	4	8
				Trenchers	2	8
Pipeline Installation (135 days)	64	2	0	Cranes	2	8
				Forklifts	2	8
				Tractors/Loaders/Backhoes	2	8

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**Table 5.2-10
Construction Scenario Assumptions – LFG Pipeline Trenched Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Paving (134 days)	16	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8

Source: See Appendix A for details.

**Table 5.2-11
Construction Scenario Assumptions – LFG Pipeline Trenchless Sections**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation at Portal Sites (20 days)	8	0	0	Graders	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	8
Portal Excavation (120 days)	16	0	0	Crushing Equipment	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	1	8
				Trenchers	1	8
Tunnel Excavation (157 days)	26	2	0	Crushing Equipment	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	1	8
				Trenchers	1	8
Site Restoration (120 days)	4	0	0	Tractors/Loaders/Backhoes	1	8

Source: See Appendix A for details.

5.2.7 North City Pure Water Facility

The new NCPWF would be located on the vacant 8.7-acre City-owned lot across Eastgate Mall to the north of the NCWRP. Table 5.2-12 provides an overview of the various structures associated with the NCPWF, and Table 5.2-13 shows the proposed construction equipment associated with the Project phase.

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**Table 5.2-12
NCPWF Building Components**

Building Name	Footprint (Square Feet)
O&M	15,500
Ozone Generating Building	5,795
Ozone Contactor	5,408.5
BAC Building	10,823
Process Building (includes MF, RO, UV/AOP)	112,500
Main Electrical Building	3,545
Liquid Oxygen Facility	1,680
RO Feed Tank	4,961
Product Water Tank	5,850
CO ₂ System	795.6
Lime System	1,668.24
Chemical Systems	10,942.08
Total	322,468.42

**Table 5.2-13
Construction Scenario Assumptions – NCPWF**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Mass grading (60 days)	36	0	1,125	Excavators	1	8
				Graders	2	8
				Off-Highway Trucks	1	8
				Plate Compactors	2	8
				Rubber-Tired Dozers	2	8
				Scrapers	4	8
				Tractors/Loaders/Backhoes	2	8
Finish grading (141 days)	18	0	1,125	Graders	1	8
				Off-Highway Trucks	1	8
				Plate Compactors	2	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	2	8
Building construction (563 days)	136	54	0	Aerial Lifts	2	8
				Cranes	2	8
				Forklifts	2	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8
				Welders	2	8

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**Table 5.2-13
Construction Scenario Assumptions – NCPWF**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Paving (10 days)	24	0	0	Crushing/Proc. Equipment	1	8
				Off-Highway Trucks	1	8
				Pavers	2	8
				Paving Equipment	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8
Architectural coating (141 days)	28	0	0	Aerial Lifts	1	8

Source: See Appendix A for details.

5.3 Miramar Reservoir Alternative Construction Emissions

The Miramar Reservoir Alternative includes (1) a new pump station at Morena Boulevard, a Wastewater Forcemain, and Brine/Centrated Line (Morena Pump Station and Pipelines); (2) expansion of the existing NCWRP; (3) construction of a new influent pump station at NCWRP and conveyance pipeline between NCWRP and the NCPWF (NCPWF Influent Pump Station); (4) construction of the new NCPWF–Miramar Reservoir; (5) construction of a new North City Pump Station; (6) construction of a North City Pipeline; (7) construction of a renewable energy facility and LFG Pipeline; (8) upgrades at the MBC; and (9) improvements at the Miramar WTP.

5.3.1 North City Pure Water Pipeline

The North City Pipeline will be designed for an average daily flow of 30 MGD with a minimum daily flow of 23 MGD and a maximum daily flow of 33 MGD. Table 5.3-1 provides a summary of each segment, the length, the anticipated construction method, location of the pipeline in the right-of-way, and easement or City property as a percentage of the segment length. The proposed construction equipment for the North City Pipeline is shown in Tables 5.3-2 and 5.3-3.

**Table 5.3-1
North City Pure Water Pipeline Alignment Summary**

Segment		Horizontal Distance (LF)	Open Cut (LF)	Trenchless or Other Method (LF)
A	West Alignment: Miramar Road	25,700	25,186	514
B	West Alignment: Black Mountain Road	4,100	2,911	1,189
C	I-15 Crossing	1,340	925	415
D	East Alignment: Carroll Canyon Road	4,285	4,242	43

Greenhouse Gas Emissions Analysis for the North City Project

**Table 5.3-1
North City Pure Water Pipeline Alignment Summary**

Segment		Horizontal Distance (LF)	Open Cut (LF)	Trenchless or Other Method (LF)
E	East Alignment: Approach to Miramar	4,300	3,354	946
<i>Subtotal</i>		39,725	36,618	3,107
F	Subaqueous Discharge	4,800	—	—
Total		44,525 (8.4 miles)	—	—

Note: LF = linear feet

**Table 5.3-2
Construction Scenario Assumptions – North City Pipeline Open Trench**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Trenching (200 days)	26	0	2,537	Concrete/Industrial Saws	1	8
				Excavators	2	8
				Off-Highway Trucks	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8
				Welders	2	8
Tunneling (200 days)	24	0	0	Bore/Drill Rigs	1	8
				Cranes	1	8
				Crushing/Proc. Equipment	1	8
				Generator Sets	1	8
				Off-Highway Trucks	1	8
				Tractors/Loaders/Backhoes	2	8
				Welders	2	8
Subaqueous Pipeline (200 days)	18	0	0	Forklifts	1	8
				Generator Sets	1	8
				Other Construction Equipment	4	8
				Tractors/Loaders/Backhoes	1	8
Paving (200 days)	18	0	0	Crushing/Proc. Equipment	1	8
				Off-Highway Trucks	1	8
				Pavers	1	8
				Rollers	2	8
				Tractors/Loaders/Backhoes	2	8

Source: See Appendix A for details.

Greenhouse Gas Emissions Analysis for the North City Project

**Table 5.3-3
Construction Scenario Assumptions – North City Pipeline Trenchless**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation at Portal Sites (100 days)	8	0	0	Graders	1	8
				Scrapers	1	8
				Tractors/Loaders/Backhoes	1	8
Portal Excavation (100 days)	14	0	0	Crushing/Proc. Equipment	1	8
				Excavators	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	1	8
				Trenchers	1	8
Pipe Installation (100 days)	2	2	0	Cranes	1	8
				Tractors/Loaders/Backhoes	1	8
				Welders	2	8
Pipe Connection (100 days)	2	0	0	Other General Industrial Equipment	1	8
Site Restoration (100 days)	4	0	0	Tractors/Loaders/Backhoes	1	8

Source: See Appendix A for details.

5.3.2 Pure Water Dechlorination Facility

A Dechlorination Facility will be located at the end of Meanley Drive off the cul-de-sac on the City's property for the Miramar Recycled Water Storage Tank. The proposed construction equipment for the Dechlorination Facility is shown in Table 5.3-4.

**Table 5.3-4
Construction Scenario Assumptions – Dechlorination Facility**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Grading (60 days)	16	0	0	Dumpers/Tenders	2	8
				Excavators	2	8
				Plate Compactors	2	8
Building construction (90 days)	100	10	0	Cement and Mortar Mixers	1	8
				Cranes	1	8
				Pumps	1	8
				Tractors/Loaders/Backhoes	1	8
				Welders	1	8

Greenhouse Gas Emissions Analysis for the North City Project

**Table 5.3-4
Construction Scenario Assumptions – Dechlorination Facility**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Paving (7 days)	16	0	0	Dumpers/Tenders	1	8
				Pavers	1	8
				Rollers	1	8

Source: See Appendix A for details.

5.3.3 Miramar Water Treatment Plant Improvements

Under the Miramar Reservoir Alternative, purified water discharged into the Miramar Reservoir will be pumped to the existing Miramar Reservoir Pump Station to the Miramar WTP for treatment and eventual distribution. The construction assumptions for the Miramar WTP is shown in Table 5.3-5.

**Table 5.3-5
Construction Scenario Assumptions – Miramar WTP Improvements**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition (10 days)	10	0	0	Concrete/Industrial Saws	1	8
				Rubber-Tired Dozers	1	8
				Tractors/Loaders/Backhoes	2	8
Building construction (60 days)	50	10	0	Aerial Lifts	1	8
				Cranes	1	8
				Forklifts	1	8
				Rollers	1	8
				Tractors/Loaders/Backhoes	1	8
				Welders	1	8

Source: See Appendix A for details.

5.3.4 Miramar Reservoir Alternative Construction Emissions

Table 5.3-6, Estimated Annual Construction GHG Emissions, shows the estimated annual GHG construction emissions associated with Project components, as well as the annualized construction emissions over a 30-year “Project life.” Complete details of the emissions calculations are provided in Appendix A of this document.

Greenhouse Gas Emissions Analysis for the North City Project

**Table 5.3-6
Estimated Construction GHG Emissions**

Project Component	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>Miramar Reservoir Alternative – 2018</i>				
North City Pipeline	132.39	0.03	0.00	133.21
<i>Miramar Reservoir Alternative – 2019</i>				
Morena Pump Station and Pipelines	1,032.70	0.24	0.00	1,038.73
NCWRP Expansion	383.55	0.07	0.00	385.20
NCPWF Influent Pump Station	283.64	0.05	0.00	284.79
MBC Improvements	147.43	0.03	0.00	148.18
North City Pump Station	233.43	0.06	0.00	234.97
NCPWF	559.52	0.15	0.00	563.18
North City Pipeline	898.73	0.21	0.00	904.03
Pure Water Dechlorination Facility	157.14	0.03	0.00	157.81
Total 2019	3,696.14	0.83	0.00	3,716.90
<i>Miramar Reservoir Alternative – 2020</i>				
North City Pump Station	155.12	0.04	0.00	156.14
Morena Pump Station and Pipelines	595.09	0.15	0.00	598.88
MBC Improvements	64.24	0.01	0.00	64.55
LFG Pipeline	577.08	0.16	0.00	581.07
NCPWS Influent Pump Station	217.84	0.03	0.00	218.67
NCWRP Expansion	483.65	0.06	0.00	485.05
NCPWF	703.64	0.14	0.00	707.01
North City Pipeline	591.84	0.15	0.00	595.51
North City Renewable Energy Facility	167.34	0.05	0.00	168.54
Miramar WTP Improvements	72.73	0.02	0.00	73.14
Total 2020	3,628.56	0.80	0.00	3,648.56
<i>Miramar Reservoir Alternative – 2021</i>				
Morena Pipelines	231.53	0.06	0.00	233.13
LFG Pipeline	448.00	0.11	0.00	450.87
NCWRP Expansion	198.77	0.03	0.00	199.57
NCPWF	348.46	0.07	0.00	350.14
North City Pipeline	409.44	0.11	0.00	412.11
North City Renewable Energy Facility	80.97	0.02	0.00	81.56
Total 2021	1,717.17	0.41	0.00	1,727.39
<i>Total Project construction GHG emissions</i>	9,174.26	2.07	0.00	9,226.05
Amortized construction GHG emissions				307.54

Source: CalEEMod Version 2016.3.1. See Appendix A for complete results.

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Greenhouse Gas Emissions Analysis for the North City Project

5.4 San Vicente Reservoir Alternative Construction Emissions

The San Vicente Reservoir Alternative would include those elements in common with the Miramar Reservoir Alternative, but with additional upgrades to meet the pipeline alignment increase compared to the Miramar Reservoir Alternative. The following sections describe those components unique to the San Vicente Reservoir Alternative and the construction emission assumptions associated with each.

5.4.1 San Vicente Pure Water Pipeline

The San Vicente Pipeline will be designed for an average daily flow of 31.4 MGD with a minimum daily flow of 27 MGD and a maximum daily flow of 35 MGD. Table 5.4-1 provides a summary of the anticipated construction method and length of each type of construction. The proposed construction equipment for the San Vicente Pipeline is shown in Tables 5.4-2 and 5.4-3.

**Table 5.4-1
San Vicente Pipeline Segment Construction Summary**

Construction Method	Segment Length (LF)	Diameter
Open Cut and Trenchless	39,232	48-inch
Open Cut and Trenchless	14,555	60-inch
Repurposed	20,583	48-inch
Open Cut	61,936	48-inch
Trenchless	2,801	48-inch
Trenchless (Microtunnel)	1,985	48-inch
Hard Rock Tunnel	5,446	60-inch

Note: LF = linear feet

**Table 5.4-2
Construction Scenario Assumptions – San Vicente Pipeline Open Trench**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Trenching (200 days)	26	0	13,073	Excavators	2	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/Backhoes	4	8
				Trenchers	2	8
Pipeline Installation (200 days)	16	0	0	Tractors/Loaders/Backhoes	1	8
Paving (200 days)	16	0	0	Pavers	2	8
				Paving Equipment	2	8
				Rollers	2	8

Source: See Appendix A for details.

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**Table 5.4-3
Construction Scenario Assumptions – San Vicente Pipeline Trenchless**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Trenching (200 days)	26	0	0	Excavators	2	8
				Rubber-Tired Dozers	2	8
				Tractors/Loaders/Backhoes	4	8
				Trenchers	2	8
Building Construction (200 days)	14	6	0	Cranes	1	8
				Generator Sets	1	8
				Rubber Tired Loaders	2	8
				Welders	2	8

Source: See Appendix A-B for details.

5.4.2 Mission Trails Booster Station

The MTBS would be located along Mission Gorge Road spread across two privately owned parcels. The proposed construction equipment for the MTBS is shown in Table 5.4-4.

**Table 5.4-4
Construction Scenario Assumptions – MTBS**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Grading (30 days)	30	0	36,750	Graders	<u>12</u>	<u>48</u>
				Off-Highway Trucks	<u>14</u>	<u>48</u>
				Plate Compactors	<u>14</u>	<u>48</u>
				Rubber-Tired Dozers	<u>12</u>	<u>48</u>
				Scrapers	<u>14</u>	<u>48</u>
				Tractors/Loaders/Backhoes	<u>22</u>	<u>48</u>
Underground install and trenching (50 days)	26	0	0	Concrete/Industrial Saws	<u>14</u>	<u>48</u>
				Excavators	<u>12</u>	<u>48</u>
				Off-Highway Trucks	<u>14</u>	<u>48</u>
				Rollers	<u>12</u>	<u>48</u>
				Tractors/Loaders/Backhoes	<u>22</u>	<u>48</u>
				Welders	<u>22</u>	<u>48</u>
Building construction (230 days)	16	2	0	Aerial Lifts	<u>22</u>	<u>48</u>
				Cranes	<u>14</u>	<u>48</u>
				Forklifts	<u>12</u>	<u>48</u>
				Rollers	<u>14</u>	<u>48</u>
				Tractors/Loaders/Backhoes	<u>14</u>	<u>48</u>
				Welders	<u>12</u>	<u>48</u>

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**Table 5.4-4
Construction Scenario Assumptions – MTBS**

Construction Phase (Duration)	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Paving (5 days)	18	0	0	Crushing/Proc. Equipment	<u>14</u>	<u>48</u>
				Off-Highway Trucks	<u>14</u>	<u>48</u>
				Pavers	<u>14</u>	<u>48</u>
				Rollers	<u>12</u>	<u>48</u>
				Tractors/Loaders/Backhoes	<u>12</u>	<u>48</u>

Source: See Appendix B for details.

5.4.3 San Vicente Reservoir Alternative Construction Emissions

Table 5.4-5, Estimated Annual Construction GHG Emissions, shows the estimated annual GHG construction emissions associated with Project components, as well as the annualized construction emissions over a 30-year “Project life.”

**Table 5.4-5
Estimated Construction GHG Emissions**

Project Component	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>San Vicente Reservoir Alternative – 2018</i>				
North City Pipeline	149.92	0.03	0.00	150.74
<i>San Vicente Reservoir Alternative - 2019</i>				
Morena Pump Station and Pipelines	1,032.70	0.24	0.00	1,038.73
NCWRP Expansion	383.55	0.07	0.00	385.20
NCPWF Influent Pump Station	283.64	0.05	0.00	284.79
MBC Improvements	147.43	0.03	0.00	148.18
North City Pump Station	233.43	0.06	0.00	234.97
NCPWF	559.52	0.15	0.00	563.18
San Vicente Pipeline	1,396.01	0.31	0.00	1,403.75
MTBS	<u>1568.221,794.52</u>	<u>0.160.23</u>	<u>0.000.00</u>	<u>1572.304,800.28</u>
Total 2019	<u>5,604.515,830.84</u>	<u>1.064.13</u>	<u>0.000.00</u>	<u>5,631.105,859.09</u>
<i>San Vicente Reservoir Alternative – 2020</i>				
North City Pump Station	155.12	0.04	0.00	156.14
Morena Pump Station and Pipelines	595.09	0.15	0.00	598.88
MBC Improvements	64.24	0.01	0.00	64.55
Landfill Gas Pipeline	577.08	0.16	0.00	581.07
NCPWS Influent Pump Station	217.84	0.03	0.00	218.67
NCWRP Expansion	483.65	0.06	0.00	485.05
NCPWF	703.64	0.14	0.00	707.01
North City Renewable Energy Facility	167.34	0.05	0.00	168.54

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**Table 5.4-5
Estimated Construction GHG Emissions**

Project Component	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
MTBS	<u>77,264.98</u>	<u>0.02</u>	<u>0.00</u>	<u>77,734.05</u>
San Vicente Pipeline	351.79	0.09	0.00	354.02
Total 2020	<u>3,393,043.76</u>	<u>0.74</u>	<u>0.00</u>	<u>3,411,663.97</u>
<i>San Vicente Reservoir Alternative – 2021</i>				
Morena Pipelines	231.53	0.06	0.00	233.13
Landfill Gas Pipeline	448.00	0.11	0.00	450.87
NCWRP Expansion	198.77	0.03	0.00	199.57
NCPWF	348.46	0.07	0.00	350.14
San Vicente Pipeline	60.90	0.02	0.00	61.35
North City Renewable Energy Facility	80.97	0.02	0.00	81.56
Total 2021	<u>1,368.62</u>	<u>0.32</u>	<u>0.00</u>	<u>1,376.63</u>
<i>Total Project construction GHG emissions</i>	<u><u>10,516.09</u></u> <u>40,827.14</u>	<u><u>2.16</u></u> <u>2.25</u>	<u><u>0.00</u></u> <u>0.00</u>	<u><u>10,570.13</u></u> <u>40,883.43</u>
Amortized construction GHG emissions				<u>362352.7834</u>

Source: CalEEMod Version 2016.3.1. See Appendix B for complete results.

Notes: Totals may not sum due to rounding.

MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

5.5 Operational Impacts

5.5.1 Miramar Reservoir Alternative

Operation of the Project would result in direct GHG emissions from vehicular traffic, testing and maintenance of stationary diesel generators, and indirect GHG emissions from use of electricity.

Mobile Sources (Motor Vehicles)

The Project would result in 60 additional staff. It is expected that during normal operations, these workers would generate in 120 one-way trips. Additionally, operational trips would be generated as a result of routine maintenance, periodic inspections and repairs of system facilities, monitoring, brush maintenance, and other operational procedures similar to those under the City's current water and wastewater treatment and distribution system. It was assumed only a minor increase in O&M trips (in addition to the 60 new employees) would be required; therefore, it was assumed on a worst-case day an additional 10 O&M-related trips would occur. In total, Project operations would be expected to generate approximately 140 average daily trips across the entire Project area.

Annual CO₂ emissions from motor vehicle trips for full Project buildout were quantified using CalEEMod Version 2016.3.1 (refer to Appendix A for additional details and model assumptions). Project-related traffic was assumed to include a mixture of vehicles in accordance

Greenhouse Gas Emissions Analysis for the North City Project

with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2022 were used to estimate emissions associated with the first phase of the Project. Table 5.5-1 presents estimated annual mobile source GHG emissions resulting from Project-generated trips.

**Table 5.5-1
Estimated Annual Mobile Source GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
Mobile Sources	217.37	0.01	0.00	217.64

Source: Appendix A.

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Electricity Production and Consumption

The generation of electricity through combustion of fossil fuels typically results in emissions of CO₂ and, to a smaller extent, CH₄ and N₂O. Electricity would be required to operate various components of the Project. The Project components will be powered by an on-site renewable energy facility. The City provided the electricity use for each Project component. The GHG emissions from the renewable energy facility account for the emissions from power usage for the Miramar Reservoir Alternative. The GHG emissions were calculated using a spreadsheet-based model and emission factors provided by the engine manufacturer (Appendix C).

The LFG to be used in the Project is generated at the nearby Miramar Landfill and is currently being emitted from the surface of the landfill or flared. This LFG is a biogenic source of GHGs, i.e., GHG emissions related to nature’s carbon cycle from the biological decomposition of waste in the landfill. Biogenic GHG emissions associated with the LFG already occur and can be considered baseline conditions, and are not an impact generated by the Project. Therefore, nonbiogenic GHG emissions from the combustion of natural gas generate the maximum Project-related GHG emissions. The amount of supplemental natural gas combusted per engine will fluctuate. Thus, these emissions are a conservative estimate. In actual practice, GHG emissions are expected to be significantly lower. However, for the analysis it was assumed that up to three of the engines would operate on 30% natural gas continuously.

The City’s current water supply includes importing one-third from the State Water Project and two-thirds from the Colorado River. The North City Project would offset the energy needed to pump, treat, and supply the imported water. The City provided annual electricity demand for the North City Project components. For components that are expanded for the project and not entirely new, only the net electricity demand was included. The total estimated energy use for the Miramar Reservoir Alternative is 126,295,000 kWh per year, which would result in 11,534 kWh/MG, assuming 30 MGD.

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The North City Renewable Energy Facility will power the NCWRP, NCPWF Influent Pump Station, NCPWF, and North City Pump Station. The Miramar WTP would receive all of its power from an on-site 1 MW solar photovoltaic system. The other components would receive electricity from San Diego Gas & Electric (SDG&E). The North City Renewable Energy Facility would export excess power to SDG&E as it will produce more energy than the Project components will demand. Although on a daily basis there would be a net import and export of electricity from the North City Renewable Energy Facility, over an entire year the Miramar Reservoir Alternative would export more power than it would import. Because the Project would offset the demand from electricity from SDG&E with power from the North City Renewable Energy Facility, the avoided GHG emissions associated with energy not used is also included in the analysis. The emissions were based on the energy demand from the Project, excess energy supplied to the grid, and emission factors for SDG&E as found in CalEEMod. The estimated GHG emissions associated with the North City Renewable Energy Facility are shown below. Table 5.5-2 presents GHG emissions associated with the Miramar Reservoir Alternative’s anticipated annual electricity consumption and the avoided emissions from grid electricity.

**Table 5.5-2
Estimated Annual Electricity Consumption GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>Avoided Emissions</i>				
Grid Energy Use ¹	41,274.36	1.66	0.35	41,421.23
<i>Project Emissions</i>				
Miramar Reservoir Alternative ²	30,880.22	2.85	0.06	30,968.58
Net Change in Emissions	(10,394.14)	1.19	(0.29)	(10,452.65)

Sources: Appendices A and C.

Notes:

MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

¹ SDG&E GHG emission factors used.

² GHG emissions calculated from North City Renewable Energy Facility.

As presented in Table 5.5-2, GHG emissions associated with avoided grid-purchased electricity would be 41,421 MT CO₂E. The purified water electrical demand and resulting GHG emissions from the natural gas use from the renewable energy facility would be 30,969 MT CO₂E per year. Accordingly, the net change in GHG emissions from the Project would be a reduction of 10,453 MT CO₂E per year. Refer to Appendices A and C for details.

Wastewater Process Emissions

Centralized wastewater treatment processes can result in CH₄ and N₂O emissions. CH₄ emissions can result under processes associated with anaerobic digestion of soluble organic material when the captured biogas is not completely combusted. It is assumed that the majority of the generated

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biogas would be combusted (e.g., cogeneration, boilers, flares) but a small amount (e.g., 1%) would not be completely combusted. N₂O emissions may be generated from the treatment of municipal wastewater during both nitrification and denitrification of the nitrogen present, usually in the form of urea, ammonia, and proteins. These compounds are converted to nitrate (NO₃) through the aerobic process of nitrification. Denitrification occurs under anoxic conditions (without free oxygen), and involves the biological conversion of nitrate into nitrogen gas (N₂). N₂O can be an intermediate product of both processes (CARB et al. 2010). Methodologies used to estimate CH₄ and N₂O emissions from wastewater treatment processes were derived from the Local Government Operations Protocol (CARB et al. 2010).

Stationary CH₄ Emissions

Annual stationary CH₄ (MT CO₂E) emissions from incomplete combustion of digester gas were calculated as follows:

$$(P \times \text{Digester Gas} \times F_{CH_4} \times D(CH_4) \times (1-DE) \times 0.0283 \times 365.25 \times 10^{-6}) \times GWP$$

Where:

P = population served by the WWTP with anaerobic digesters

Digester Gas = cubic feet of digester gas produced per person per day [ft³/person/day]

F_{CH₄} = fraction of CH₄ in biogas

D(CH₄) = density of methane [g/m³]

DE = CH₄ Destruction Efficiency

0.0283 = conversion from ft³ to m³

365.25 = conversion factor [day/year]

10⁻⁶ = conversion from g to metric ton [metric ton/g]

GWP = Global Warming Potential

According to the City of San Diego's Sewer Design Guide, daily per-capita wastewater flow is approximately 80 gallons per capita per day (City of San Diego 2015c). The NCWRP, which would generate the biosolids processed by the MBC, would have an AADF of 30 MGD after expansion; therefore, for the purposes of estimating emissions, it is estimated that the MBC facility would have a service population equivalent of 375,000. Stationary CH₄ emissions from incomplete combustion of biogas were estimated to be approximately 417 MT CO₂E per year (see Appendix A for details).

Greenhouse Gas Emissions Analysis for the North City Project

Process N₂O Emissions

Process N₂O emissions can occur in facilities with nitrification/denitrification processes, and to a lesser extent in facilities without these processes. The NCWRP would increase capacity by 21 MGD during peak daily loads resulting in a service population equivalent of 262,500. Process N₂O emissions were estimated to be approximately 684 MT CO₂E per year (see Appendix A for details). Annual process N₂O emissions (metric tons CO₂E) were calculated as follows:

$$((P_{total} \times Find-com) \times EF_{nit/denit} \times 10^{-6}) \times GWP$$

Where:

P_{total} = total population that is served by the centralized WWTP adjusted for industrial discharge

Find-com = factor for industrial and commercial co-discharge of waste into the sewer system

EF_{nit/denit} = emission factor for a WWTP with nitrification/denitrification
[g/N₂O/person/year]

10⁻⁶ = conversion from g to metric ton [metric ton/g]

GWP = Global Warming Potential

N₂O emissions can also be generated through discharge to surface waters such as the Miramar Reservoir. Minimal N₂O emissions could occur from advanced water purification facility effluent discharge due to the removal of nitrogen compounds by reverse osmosis (RO). Annual N₂O emissions (MT CO₂E) from discharge were calculated as follows:

$$(N\ Load \times EF_{effluent} \times 365.25 \times 10^{-3} \times 44/28) \times GWP$$

Where:

N Load = measured average total nitrogen discharged [kg N/day]

EF_{effluent} = emission factor [kg N₂O-N/kg sewage-N produced]

365.25 = conversion factor [day/year]

10⁻³ = conversion from kg to metric ton [metric ton/kg]

44/28 = molecular weight ratio of N₂O to N₂

GWP = Global Warming Potential

The Project would produce 30 MGD of purified water that could be discharged to a surface water source resulting in minimal process emissions. Based on test results, the average total nitrogen in purified water would be 0.5 mg/L (MWH et al. 2016). N₂O emissions from discharge were estimated to be approximately 49 MT CO₂E per year (see Appendix A for details).

Greenhouse Gas Emissions Analysis for the North City Project

Table 5.5-3 provides a summary of process and discharge GHG emissions.

**Table 5.5-3
Estimated Annual Wastewater Process and Discharge GHG Emissions**

Source	MT CH ₄	MT N ₂ O	MT CO ₂ E
Incomplete combustion of digester gas	16.68	—	416.98
WWTP with nitrification/denitrification	—	2.30	684.47
Effluent discharge emissions	—	0.16	48.53
Total Process Emissions			1,149.98

Source: Appendix A.

Notes: MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Refrigerant Use

The air-cooled chillers in the North City Project will contain refrigerant. The 60-ton chiller will have a total refrigerant charge of 131 pounds (lbs) of R-410A refrigerant. As discussed in Section 2.2, refrigerants such as R-410A are high GWP HFCs that can have a large impact if released into the atmosphere. The EPA-tolerated leak-rate for commercial HVAC equipment is 10% per year. Assuming that rate, it is estimated that up to 13.1 lbs of R-410A refrigerant would be emitted per year. The GWP for R-410A is 2,088, meaning that one lb of R-410A is 2,088 times more potent than CO₂ as a GHG (The Climate Registry 2016). Using the annual leak rate and the GWP, it is estimated that 12 MT CO₂E would be emitted per year from refrigerant use.

Diesel Generators

To conservatively estimate stationary source emissions related to generator use, it was assumed a new diesel-powered emergency generator would be required for back-up power at the NCPWF. For the purposes of a conservative analysis, it was assumed the generator would be approximately 750 kilowatts (approximately 1,000 HP). The compressor station located on the Miramar Landfill would also have a 2,500 kilowatt Tier 4 diesel emergency generator. It was assumed generators would only be used for emergency back-up power in the event of power outages, as well as for routine testing and maintenance. CARB's Airborne Toxic Control Measure for stationary diesel engines restricts diesel engine operation for testing and maintenance to 50 hours per year, unless a diesel particulate filter is used to reduce PM₁₀ emissions (CARB 2011b). Thus, it was assumed that the engines would operate up to 50 hours per year (1 hour per week, 50 weeks per year) for testing and maintenance. Emission factors for CO₂ and CH₄ were obtained from the CalEEMod User's Guide, Appendix D, for

Greenhouse Gas Emissions Analysis for the North City Project

generators over 1,001 HP⁴ operating in 2022 (first year of Project operation). Table 5.5-4 presents estimated annual GHG emissions associated with testing and maintenance of emergency diesel generators.

**Table 5.5-4
Estimated Annual Diesel Generators GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
Diesel Generators-NCPWF	19.04	0.00	0.00	19.11
Compressor Station	<u>70.50</u>	<u>0.00</u>	<u>0.00</u>	<u>70.86</u>
Total Generator Emissions	<u>89.54</u>	<u>0.00</u>	<u>0.00</u>	<u>89.97</u>

Source: Appendix A

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Summary of GHG Emissions

Table 5.5-5 shows the total operational GHG emissions for the Miramar Reservoir Alternative after accounting for amortized construction emissions.

**Table 5.5-5
Summary of Estimated Annual GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>Avoided Emissions</i>				
Grid Energy Use	41,274.36	1.66	0.35	41,421.23
<i>Miramar Reservoir Alternative</i>				
Mobile Sources	217.37	0.01	0.00	217.64
Electricity Production	30,880.22	2.85	0.06	30,968.58
Wastewater Process Emissions	—	16.68	2.46	1,149.98
Refrigerant Use	12.41	0.00	0.00	12.41
Diesel Generators	<u>19.0489.54</u>	0.00	0.00	<u>19.1189.97</u>
Waste	10.53	0.62	0.00	26.10
Water	8.51	0.06	0.00	10.48
Amortized Construction Emissions				307.54
Total Project Emissions				<u>32,782.732,741.84</u>
Net Change in Emissions				<u>(8,638.53)(8,709.39)</u>

Source: See Appendices A and C for complete results.

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

⁴ The CalEEMod User's Guide does not provide emission factors for generator sets rated at 751 to 1,000 HP; however, the CO₂ emission factor for generator sets rated at 501–750 HP and greater than 1,000 HP are the same and the CH₄ factor for the larger HP range is slightly higher than that for the smaller HP range.

Greenhouse Gas Emissions Analysis for the North City Project

Implementation of the Project, as analyzed at the Project level of analysis, would result in a net decrease of approximately 8,709–639 MT CO₂E per year as a result of offsetting the need for imported water sources and grid energy use.

5.5.2 San Vicente Reservoir Alternative

Operation of the Project would result in direct GHG emissions from vehicular traffic, testing and maintenance of stationary diesel generators, and indirect GHG emissions from use of electricity.

Mobile Sources (Motor Vehicles)

The Project would result in 60 additional staff. It is expected that during normal operations, these workers would generate in 120 one-way trips. Additionally, operational trips would be generated as a result of routine maintenance, periodic inspections and repairs of system facilities, monitoring, brush maintenance, and other operational procedures similar to those under the City’s current water and wastewater treatment and distribution system. It was assumed only a minor increase in O&M trips (in addition to the 60 new employees) would be required; therefore, it was assumed on a worst-case day an additional O&M-related trips would occur. In total, Project operations would be expected to generate approximately 140 average daily trips across the entire Project area.

Annual CO₂ emissions from motor vehicle trips for full project buildout were quantified using CalEEMod Version 2016.3.1 (refer to Appendix B for additional details and model assumptions). Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2022 were used to estimate emissions associated with the first phase of the Project. Table 5.5-6 presents estimated annual motor vehicle GHG emissions resulting from Project-generated trips.

**Table 5.5-6
Estimated Annual Motor Vehicle GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
Mobile Sources	217.37	0.01	0.00	217.64

Source: Appendix B

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Electricity Consumption

The generation of electricity through combustion of fossil fuels typically results in emissions of CO₂ and, to a smaller extent, CH₄ and N₂O. Electricity would be required to operate various components of the San Vicente Reservoir Alternative. The Project components will be powered either by an existing on-site North City Renewable Energy Facility or through

Greenhouse Gas Emissions Analysis for the North City Project

SDG&E. The City provided electricity use for each Project component. A spreadsheet model was used to calculate GHG emissions from the North City Renewable Energy Facility. CalEEMod was used to calculate GHG emissions from power derived from SDG&E. The purified water electricity usage was estimated to be approximately 144,904,000 kWh/year. Because the Project would offset the demand from electricity from SDG&E, the avoided emissions associated with energy not used is also included in the analysis. Table 5.5-7 presents GHG emissions associated with the typical urban imported water use and the North City Project’s anticipated annual electricity consumption.

**Table 5.5-7
Estimated Annual Electricity Consumption GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>Avoided Emissions</i>				
Grid Energy Use ¹	44,087.86	1.77	0.38	44,244.70
<i>Project Emissions</i>				
San Vicente Reservoir Alternative ²	34,148.31	2.98	0.09	34,248.30
Net Change in Emissions	(9,939.55)	1.21	(0.29)	(9,996.40)

Sources: Appendices B and C.

Notes:

MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

¹ SDG&E GHG emission factors used.

² GHG emissions calculated from North City Renewable Energy Facility and SDG&E.

As presented in Table 5.5-7, GHG emissions associated with avoided grid-purchased electricity would be 44,245 MT CO₂E. The purified water electrical demand and resulting GHG emissions from the natural gas use from the renewable energy facility and grid-purchased electricity would be 34,248 MT CO₂E per year. Accordingly, the net change in GHG emissions from the Project would be a reduction of 9,996 MT CO₂E per year. Refer to Appendices B and C for details.

Wastewater Process Emissions

Stationary CH₄ Emissions

According to the City of San Diego’s Sewer Design Guide, daily per-capita wastewater flow is approximately 80 gallons per capita per day (City of San Diego 2015c). The NCWRP, which would generate the biosolids processed by the MBC, would have an AADF of 30 MGD after expansion; therefore, for the purposes of estimating emissions, it is estimated that the MBC facility would have a service population equivalent of 375,000. Stationary CH₄ emissions from incomplete combustion of biogas were estimated to be approximately 417 MT CO₂E per year (see Appendix B for details).

Greenhouse Gas Emissions Analysis for the North City Project

Process N₂O Emissions

Process N₂O emissions can occur in facilities with nitrification/denitrification processes, and to a lesser extent in facilities without these processes. The NCWRP would increase capacity by 21 MGD during peak daily loads resulting in a service population equivalent of 262,500. Process N₂O emissions were estimated to be approximately 684 MT CO₂E per year (see Appendix B for details).

N₂O emissions can also be generated through discharge to surface waters such as the Miramar Reservoir. Minimal N₂O emissions could occur from advanced water purification facility effluent discharge due to the removal of nitrogen compounds by reverse osmosis (RO). The Project would produce 30 MGD of purified water that could be discharged to a surface water source resulting in minimal process emissions. Based on test results, the average total nitrogen in discharged effluent would be 0.5 mg/L (MWH et al. 2016). N₂O emissions from discharge were estimated to be approximately 49 MT CO₂E per year (see Appendix B for details).

Table 5.5-8 provides a summary of process and discharge GHG emissions.

**Table 5.5-8
Estimated Annual Wastewater Process and Discharge GHG Emissions**

Source	MT CH ₄	MT N ₂ O	MT CO ₂ E
Incomplete combustion of digester gas	16.68	—	416.98
WWTP with nitrification/denitrification	—	2.30	684.47
Effluent discharge emissions	—	0.16	48.53
Total Process Emissions			1,149.98

Source: Appendix B

Notes: MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Refrigerant Use

The air-cooled chillers in the North City Project will contain refrigerant. The 60-ton chiller will have a total refrigerant charge of 131 lbs of R-410A refrigerant. As discussed in Section 2.2, refrigerants such as R-410A are high GWP HFCs that can have a large impact if released into the atmosphere. The EPA-tolerated leak-rate for commercial HVAC equipment is 10% per year. Assuming that rate, it is estimated that up to 13.1 lbs of R-410A refrigerant would be emitted per year. The GWP for R-410A is 2,088, meaning that 1 lb of R-410A is 2,088 times more potent than CO₂ (The Climate Registry 2016). Using the annual leak rate and the GWP, it is estimated that 12 MT CO₂E would be emitted per year from refrigerant use.

Greenhouse Gas Emissions Analysis for the North City Project

Diesel Generators

To conservatively estimate stationary source emissions related to generator use, it was assumed a new diesel-powered emergency generator would be required for back-up power at the NCPWF. For the purposes of a conservative analysis, it was assumed the generator would be approximately 750 kilowatts (approximately 1,000 HP). The compressor station located on the Miramar Landfill would also have a 2,500 kilowatt Tier 4 diesel emergency generator. It was assumed generators would only be used for emergency back-up power in the event of power outages, as well as for routine testing and maintenance. CARB’s Airborne Toxic Control Measure for stationary diesel engines restricts diesel engine operation for testing and maintenance to 50 hours per year, unless a diesel particulate filter is used to reduce PM₁₀ emissions (CARB 2011b). Thus, it was assumed that the engines would operate up to 50 hours per year (1 hour per week, 50 weeks per year) for testing and maintenance. Emission factors for CO₂ and CH₄ were obtained from the CalEEMod User’s Guide, Appendix D for generators over 1,001 HP⁵ operating in 2022 (first year of Project operation). Table 5.5-9 presents estimated annual GHG emissions associated with testing and maintenance of emergency diesel generators.

**Table 5.5-9
Estimated Annual Diesel Generators GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<u>Diesel Generators NCPWF</u>	19.04	0.00	0.00	19.11
<u>Compressor Station</u>	<u>70.50</u>	<u>0.00</u>	<u>0.00</u>	<u>70.86</u>
Total Generator Emissions	89.54	0.00	0.00	89.97

Source: Appendix B

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Summary of GHG Emissions

Table 5.5-10 shows the San Vicente Reservoir Alternative total operational GHG emissions after accounting for amortized construction emissions.

**Table 5.5-10
Summary of Estimated Annual GHG Emissions**

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>Avoided Emissions</i>				
Grid Energy Use	44,087.86	1.77	0.38	44,244.70

⁵ The CalEEMod User’s Guide does not provide emission factors for generator sets rated at 751 to 1,000 HP; however, the CO₂ emission factor for generator sets rated at 501–750 HP and greater than 1,000 HP are the same and the CH₄ factor for the larger HP range is slightly higher than that for the smaller HP range.

Greenhouse Gas Emissions Analysis for the North City Project

Table 5.5-10
Summary of Estimated Annual GHG Emissions

Emissions Source	MT CO ₂	MT CH ₄	MT N ₂ O	MT CO ₂ E
<i>San Vicente Reservoir Alternative</i>				
Mobile Sources	217.37	0.01	0.00	217.64
Electricity Consumption	34,148.31	2.98	0.09	34,248.30
Wastewater Process Emissions	-	16.68	2.46	1,149.98
Refrigerant Use	12.41	0.00	0.00	12.41
Diesel Generators	19,0489.54	0.00	0.00	49,1189.97
Waste	10.36	0.61	0.00	25.66
Water	8.37	0.06	0.00	10.31
Amortized Construction Emissions	-	-	-	362352.7834
Total Project Emissions				36,106.6136,046.49
Net Change in Emissions				(8,138.09)(8,498.51)

Source: See Appendices B and C for complete results.

Notes: MT CO₂ = metric tons of carbon dioxide; MT CH₄ = metric tons of methane; MT N₂O = metric tons of nitrous oxide; MT CO₂E = metric tons of carbon dioxide equivalent

Implementation of the Project, as analyzed at the Project level of analysis, would result in a net decrease of approximately ~~8,499~~138 MT CO₂E per year as a result of offsetting the need for imported water sources and grid energy demand.

5.6 Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

For the purposes of discussing significance of GHG impacts, because the two alternatives are similar in how they apply to the City of San Diego’s GHG significance criteria, they are discussed together in this section.

As discussed in Section 4.2, the City of San Diego evaluates GHG significance based on a project’s consistency with the City’s CAP using the CAP Consistency Checklist (see Appendix D). Step 1 of the checklist determines the project’s consistency with the land use assumptions used in the CAP. As discussed in Section 6.1, Land Use, of the Draft EIR/Environmental Impact Statement (EIR/EIS), the Miramar Reservoir and San Vicente Reservoir components are anticipated to be in conformance with adopted land use designations of applicable community or general plans. See Section 6.1 for a description of the zoning and land use designations for the Project components. According to the SANDAG 2050 Regional Transportation Plan (RTP), the City of San Diego is projected to have 838,909 civilian jobs in 2020, 916,990 jobs in 2035, and 1,006,880 jobs in 2050 (SANDAG 2011). The North City Project is expected to add up to 60 jobs between several proposed facilities in 2022. The City

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of San Diego is expected to add 78,081 jobs between 2020 and 2035, or about 2,231 per year. As such, the additional 60 jobs the North City Project would create would be within SANDAG's growth projections for the City of San Diego within the specified time frame. Therefore, the North City Project would be consistent with the 2050 RTP, and the Alternatives would be consistent with Step 1 of the CAP Checklist.

Step 2 of the checklist is not applicable to development projects that would not require a certificate of occupancy from the Building Official; rather public projects are required to implement best management practices for construction activities as set forth in the GREENBOOK (for public projects). The City has created the WHITEBOOK, a supplement which takes precedence over the specification language contained in the GREENBOOK and addresses the unique conditions in the City that are not addressed in the GREENBOOK. Mitigation measure MM-PU-1, which can be found in Section 6.15, Public Utilities, of the Draft EIR/EIS, requires the Project to adhere to the requirements of Section 702 of the City's WHITEBOOK during construction with regards to the reduction of construction and demolition waste. Step 2 only applies to those parts of the Project that require a certificate of occupancy. Section 10-1 of the City's WHITEBOOK implements the City Council Green Building Policy 900-14, which requires new or significantly remodeled City facilities to be designed and constructed to achieve energy consumption levels at least 15% below the then current Title 24 standards. Also, it requires new construction projects over 5,000 square feet to obtain Leadership in Energy and Environmental Design (LEED) Silver Rating Certification from the U.S. Green Building Council. The following discussion outlines the North City Project's applicability to Step 2 of the CAP Consistency Checklist.

Strategy 1: Energy & Water Efficient Buildings.

1. Cool/Green Roofs

The North City Project would include a green roof on the NCPWF O&M building to help reduce energy consumption and stormwater runoff that would meet the minimum requirements of this section, weighing at least 25 pounds per square inch. The Project would answer Yes to this checklist question.

2. Plumbing Fixtures and Fittings

This item requires nonresidential buildings to have plumbing fixtures and fittings that meet the requirements under the CalGreen standard, Section A5.303.3. As the North City Project is committed to achieving the LEED Silver Certification, one of the main components to the projects design is water efficiency. The Project is designed to exceed the minimum flow rates in

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the CalGreen standard. The Project would comply with this standard and would answer Yes to the checklist question.

Strategy 2: Clean & Renewable Energy

3. Energy Performance Standard/Renewable Energy

This checklist question requires nonresidential projects to have an energy budget that exceeds Title 24 standards with indoor lighting, mechanical systems, or through on-site renewable energy generation. The North City Project includes a renewable energy facility that is powered by 90% renewable LFG and 10% natural gas. The Miramar WTP also includes a solar photovoltaic system that would completely cover its energy needs. The energy consumption for the Miramar Reservoir Alternative would be met completely by the renewable energy facility. The San Vicente Reservoir Alternative would still require approximately 4.6% of its power from SDG&E. The Project would exceed the minimum requirement for this checklist item and would answer Yes to the checklist question.

Strategy 3: Bicycling, Walking, Transit & Land Use

4. Electric Vehicle Charging

This checklist item requires nonresidential projects of a minimum size to install electric vehicle charging stations at the project site. According to Table 4 of Attachment A of the CAP Consistency Checklist, for industrial, manufacturing, or process plants or industrial parks, electric vehicle charging stations are required for projects with 1,000 or more employees, 40 acres or more of land, or 650,000 square feet or more of gross floor area. The North City Project does not meet any of those three criteria, so the answer to the checklist question would be N/A.

5. Bicycle Parking Spaces

This checklist question asks if the project would provide more short- and long-term bicycle parking spaces than is required in the City's Municipal Code (Chapter 14, Article 2, Division 5). The code requires nonresidential developments to have 5% of the required automobile parking available for bicycle parking spaces. As the North City Project is committed to achieving the LEED Silver Certification, one of the main components of the Project's design is centered around location and transportation. The Project is designed to include bike parking in excess of the City's Municipal Code and locker rooms with showers for employees. The Project would comply with this standard and would answer Yes to the checklist question.

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6. Shower Facilities

This checklist question asks if the proposed development has over 10 employees and if a shower/changing facility is incorporated into the design. The North City Project includes 10 showers in the men's locker room and 8 showers in the women's locker room. For a project with 11–50 employees, it is required to have 1 shower stall and 2 lockers. The Project exceeds the requirement and would answer Yes to the checklist question.

7. Designated Parking Spaces

This checklist question asks if the project within a TPA provides designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles. The North City Project is not located within a TPA and thus this question does not apply to the Project. Therefore, the Project would answer N/A to this checklist question.

8. Transportation Demand Management Program

This checklist question asks if the project, if it accommodates over 50 employees includes a transportation demand management program. The North City Project would participate in the City's Transportation Alternatives Program, which subsidizes vanpool, trolley, carpool, and coaster usage as a traffic demand management function. The Project would meet the requirements of this question and thus would answer Yes.

Step 3 of the checklist is only applicable if Step 1 is answered in the affirmative under option three, which is not the case for the Alternatives, which answered Step 1 in the affirmative under option one. Therefore, Step 3 is not applicable to the Alternatives.

The North City Project would be consistent with the City of San Diego's CAP Checklist Steps 1 and 2 as discussed above; Step 3 would not apply to the Project. Accordingly, the Project is consistent with the City's CAP. In addition, the Project would assist the City in achieving the CAP's GHG emissions reduction targets by reducing the City's reliance on imported water supplies through the provision of a locally produced water supply. The following discussion outlines the CAP strategies and how the project is consistent with them.

The City approved the CAP on December 15, 2015 (City of San Diego 2015a). The CAP includes the following five strategies developed to reduce citywide GHG emissions and to achieve reduction targets for the years 2020 and 2035:

1. Energy and Water Efficient Buildings
2. Clean and Renewable Energy

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3. Bicycling, Walking, Transit & Land Use
4. Zero Waste (Gas & Waste Management)
5. Climate Resiliency

Each of the City's CAP strategies includes goals to identify ways to reduce GHG emissions. The Project's consistency with the applicable strategies is discussed below.

Strategy 1: Energy and Water Efficient Buildings

The CAP's first strategy is aimed at energy and water efficient buildings. The City's goals under strategy 1 include reducing residential building and municipal energy consumption, and reducing daily per-capita water consumption. Actions to reduce energy consumption include consideration of a residential Energy Conservation and Disclosure Ordinance and a Municipal Energy Strategy and Implementation Plan. Actions related to water efficiency include implementing new water rates and billing structure, consideration of a Water Conservation and Disclosure Ordinance, and implementation of an Outdoor Landscaping Ordinance requiring weather-based irrigation controllers. Strategy 1 actions are directed at City staff and City Council to adopt ordinances, plans, and supporting City requirements to achieve the City's targets.

The Project would support achievement of Strategy 1 by providing a less energy-intensive, domestic water supply source for the region. Electricity is consumed, and associated GHG emissions are generated, as a result of water supply, treatment, and distribution and treatment of wastewater generated. The Project's provision of a locally produced water supply would substantially reduce energy consumption currently required for the import, supply, and conveyance of traditional (imported) water sources. In addition, the Project would not conflict with the City's ability to implement the actions identified in the CAP related to energy- and water-efficient buildings. The Project would be consistent with the applicable CAP goals and actions identified in Strategy 1.

Strategy 2: Clean and Renewable Energy

Strategy 2 focuses on clean and renewable energy. Strategy 2 goals of transitioning to 100% renewable energy on the citywide electrical grid by 2035, increasing municipal zero-emissions vehicles, and converting existing diesel municipal solid waste collection trucks to compressed natural gas or other alternative low-emissions fuels would be implemented by the City and would not apply to implementation of the Project.

The Project would include a renewable energy facility that would use 90% renewable LFG and 10% natural gas. The Project would also include a solar photovoltaic system that would completely power the Miramar WTP. The North City Renewable Energy Facility power would completely offset the power consumption needs of the Miramar Reservoir Alternative and would cover 95.4%

Greenhouse Gas Emissions Analysis for the North City Project

of the San Vicente Reservoir Alternative's power consumption needs. Therefore, the Project would support the City's goal to increase use of renewable energy. In addition, the Project would not conflict with the City's ability to implement the actions identified in the Strategy 2.

Strategy 3: Bicycling, Walking, Transit & Land Use

Strategy 3 outlines goals and actions related to bicycling, walking, transit, and land use. Strategy 3 goals include increasing the use of mass transit, increasing commuter walking and bicycling opportunities, reducing vehicle fuel consumption, and promoting effective land use to reduce vehicle miles traveled.

The North City Project would include bicycle parking, shower facilities, and locker rooms. The Project would also participate in the City's Transportation Alternatives Program, which subsidizes vanpool, trolley, carpool and coaster usage as a traffic demand management function. Therefore, the Project would support the City's strategy to reduce vehicle miles traveled. In addition, the Project would not conflict with the City's ability to implement the actions identified in the Strategy 3.

Strategy 4: Zero Waste (Gas & Waste Management)

Strategy 4, which focuses on zero waste, includes the goal of diverting solid waste, capturing landfill CH₄ gas emissions, and capturing CH₄ gas from wastewater treatment.

Both Strategy 4 goals would be implemented by various City departments, and the Project would not conflict with implementation of the actions required to meet the City's targets. In addition, the Project would capture CH₄ gas during wastewater treatment. Furthermore, the Project would comply with the goal of diverting 75% of the solid waste by 2020 consistent with statewide goals. The Project would be consistent with the applicable CAP goals and actions identified in Strategy 4.

Strategy 5: Climate Resiliency

The fifth and last strategy relates to climate resiliency and includes the goal of increasing tree canopy coverage. The action under this goal includes consideration of a citywide Urban Tree Planting Program, which would incorporate water conservation measures and prioritization of drought-tolerant and native trees and plantings in areas with recycled water.

The intent of the Project is to avoid or minimize all potential impacts to trees and sensitive vegetation communities where possible. However, minimal vegetation removal may occur during construction of the Project components. As discussed in Section 6.4, Biological Resources, of the Draft EIR/EIS, potential temporary and permanent impacts to sensitive upland

Greenhouse Gas Emissions Analysis for the North City Project

vegetation communities will be mitigated per the mitigation ratios outlined in Chapter 10 of the Draft EIR/EIS. Based on the site plans, the Project does not include the specific removal of any trees and would avoid or minimize disturbance of existing trees to the extent feasible. The Project does include additional planting of canopy trees and other vegetation that would support this strategy. Moreover, the Project would not conflict with the City's actions to increase tree canopy coverage through a planting program and supporting measures. Strategy 5 of the CAP is not directly applicable to the Project; however, the Project would not conflict with the City's actions to implement Strategy 5.

The Project would not conflict with the CAP strategies applicable to the Project and would not impede the City's ability to implement the actions identified in the CAP to achieve the CAP's goals and targets and associated GHG emission reductions. As such, the Project would comply with, and support the goals and policies of, the City's CAP, as well as those of the General Plan (CE-A.2, CE-A.8, CE-A.9, CE-F.3, CE-I.4, and CE-I.5). Therefore, the Project would not have a significant impact.

The North City Project's GHG emissions would not have a significant cumulative impact on the environment.

5.7 NEPA Considerations

As shown in Tables 5.5-5 and 5.5-10, the ~~estimated operational GHG emissions for the Miramar Reservoir and San Vicente Reservoir Alternatives do exceed the 25,000 MT CO₂e per year threshold, mainly due to the North City Renewable Energy Facility~~ would result in a net negative impact with GHG emissions due to the North City Renewable Energy Facility. The projects would be required to implement mitigation measures MM-AQ-1, MM-AQ-2, and MM-AQ-3 in addition to following applicable SDAPCD Rules and Regulations. For these reasons, the Miramar Reservoir and San Vicente Reservoir Alternative operational GHG emissions would not result in a substantial adverse effect related to the generation of GHG emissions.

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APPENDIX A

*CalEEMod Outputs and Estimated Emissions
for the Miramar Reservoir Alternative*

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

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San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

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Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

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Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

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tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

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tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2020	12-31-2020	0.6593	0.3958
2	1-1-2021	3-31-2021	0.5820	0.3851
3	4-1-2021	6-30-2021	0.4714	0.3938
4	7-1-2021	9-30-2021	0.4700	0.3938
		Highest	0.6593	0.3958

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4629	1.0000e-005	1.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4629	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4629	1.0000e-005	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	0.00	42.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.23	46.23	100.00	0.00	46.90

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2920	2.9365	1.9703	3.1400e-003		0.1650	0.1650		0.1518	0.1518	0.0000	276.2689	276.2689	0.0894	0.0000	278.5027
Total	0.2920	2.9365	1.9703	3.1400e-003		0.1650	0.1650		0.1518	0.1518	0.0000	276.2689	276.2689	0.0894	0.0000	278.5027

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3.2 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.1100e-003	1.6300e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9281	1.9281	1.7000e-004	0.0000	1.9325
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0900e-003	7.1200e-003	0.0680	2.2000e-004	0.0219	1.5000e-004	0.0220	5.8100e-003	1.4000e-004	5.9500e-003	0.0000	19.5885	19.5885	5.7000e-004	0.0000	19.6027
Total	9.2900e-003	0.0142	0.0697	2.4000e-004	0.0223	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003	0.0000	21.5166	21.5166	7.4000e-004	0.0000	21.5352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0770	1.6001	2.1165	3.1400e-003		0.0874	0.0874		0.0874	0.0874	0.0000	276.2686	276.2686	0.0894	0.0000	278.5024
Total	0.0770	1.6001	2.1165	3.1400e-003		0.0874	0.0874		0.0874	0.0874	0.0000	276.2686	276.2686	0.0894	0.0000	278.5024

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3.2 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.1100e-003	1.6300e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9281	1.9281	1.7000e-004	0.0000	1.9325
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0900e-003	7.1200e-003	0.0680	2.2000e-004	0.0219	1.5000e-004	0.0220	5.8100e-003	1.4000e-004	5.9500e-003	0.0000	19.5885	19.5885	5.7000e-004	0.0000	19.6027
Total	9.2900e-003	0.0142	0.0697	2.4000e-004	0.0223	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003	0.0000	21.5166	21.5166	7.4000e-004	0.0000	21.5352

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0565	0.6156	0.3903	7.3000e-004		0.0316	0.0316		0.0291	0.0291	0.0000	63.9849	63.9849	0.0207	0.0000	64.5022
Total	0.0565	0.6156	0.3903	7.3000e-004		0.0316	0.0316		0.0291	0.0291	0.0000	63.9849	63.9849	0.0207	0.0000	64.5022

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	7.6300e-003	2.0200e-003	2.0000e-005	4.2000e-004	4.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.6000e-004	0.0000	1.7053	1.7053	1.3000e-004	0.0000	1.7087
Worker	0.0116	9.0900e-003	0.0868	2.8000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.6000e-003	0.0000	25.0018	25.0018	7.3000e-004	0.0000	25.0200
Total	0.0119	0.0167	0.0889	3.0000e-004	0.0284	2.3000e-004	0.0286	7.5400e-003	2.1000e-004	7.7600e-003	0.0000	26.7071	26.7071	8.6000e-004	0.0000	26.7287

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0179	0.3735	0.4603	7.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	63.9848	63.9848	0.0207	0.0000	64.5021
Total	0.0179	0.3735	0.4603	7.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	63.9848	63.9848	0.0207	0.0000	64.5021

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	7.6300e-003	2.0200e-003	2.0000e-005	4.2000e-004	4.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.6000e-004	0.0000	1.7053	1.7053	1.3000e-004	0.0000	1.7087
Worker	0.0116	9.0900e-003	0.0868	2.8000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.6000e-003	0.0000	25.0018	25.0018	7.3000e-004	0.0000	25.0200
Total	0.0119	0.0167	0.0889	3.0000e-004	0.0284	2.3000e-004	0.0286	7.5400e-003	2.1000e-004	7.7600e-003	0.0000	26.7071	26.7071	8.6000e-004	0.0000	26.7287

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0474	0.5151	0.3517	6.8000e-004		0.0255	0.0255		0.0235	0.0235	0.0000	59.4193	59.4193	0.0192	0.0000	59.8997
Total	0.0474	0.5151	0.3517	6.8000e-004		0.0255	0.0255		0.0235	0.0235	0.0000	59.4193	59.4193	0.0192	0.0000	59.8997

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3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.4100e-003	1.7000e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.3000e-004	0.0000	1.5689	1.5689	1.2000e-004	0.0000	1.5719
Worker	0.0102	7.6700e-003	0.0754	2.5000e-004	0.0259	1.8000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.4355	22.4355	6.2000e-004	0.0000	22.4511
Total	0.0104	0.0141	0.0771	2.7000e-004	0.0263	1.9000e-004	0.0265	7.0000e-003	1.7000e-004	7.1800e-003	0.0000	24.0044	24.0044	7.4000e-004	0.0000	24.0230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0166	0.3468	0.4274	6.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	59.4192	59.4192	0.0192	0.0000	59.8996
Total	0.0166	0.3468	0.4274	6.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	59.4192	59.4192	0.0192	0.0000	59.8996

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3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.4100e-003	1.7000e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.3000e-004	0.0000	1.5689	1.5689	1.2000e-004	0.0000	1.5719
Worker	0.0102	7.6700e-003	0.0754	2.5000e-004	0.0259	1.8000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.4355	22.4355	6.2000e-004	0.0000	22.4511
Total	0.0104	0.0141	0.0771	2.7000e-004	0.0263	1.9000e-004	0.0265	7.0000e-003	1.7000e-004	7.1800e-003	0.0000	24.0044	24.0044	7.4000e-004	0.0000	24.0230

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0841	0.8656	0.9818	1.5300e-003		0.0454	0.0454		0.0418	0.0418	0.0000	134.1573	134.1573	0.0434	0.0000	135.2421
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0841	0.8656	0.9818	1.5300e-003		0.0454	0.0454		0.0418	0.0418	0.0000	134.1573	134.1573	0.0434	0.0000	135.2421

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3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709
Total	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0376	0.7568	1.1588	1.5300e-003		0.0408	0.0408		0.0408	0.0408	0.0000	134.1572	134.1572	0.0434	0.0000	135.2419
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0376	0.7568	1.1588	1.5300e-003		0.0408	0.0408		0.0408	0.0408	0.0000	134.1572	134.1572	0.0434	0.0000	135.2419

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3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709
Total	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4629	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Unmitigated	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4628					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003
Total	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4628					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Total	0.4628	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Morena Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5370	1.1000e-004	0.0122	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005	0.0000	0.0277

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5364	6.0000e-005	7.0400e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005	0.0000	0.0147

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.45	42.06	0.00	0.00	50.00	50.00	0.00	50.00	50.00	0.00	46.09	46.09	57.14	0.00	46.85

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9300e-003	0.1033	0.0235	2.9000e-004	6.4700e-003	3.3000e-004	6.8000e-003	1.7700e-003	3.2000e-004	2.0900e-003		31.7158	31.7158	2.7900e-003		31.7857
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1352	0.1988	1.1077	3.6800e-003	0.3386	2.5700e-003	0.3411	0.0898	2.3900e-003	0.0922		369.2262	369.2262	0.0126		369.5415

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9300e-003	0.1033	0.0235	2.9000e-004	6.4700e-003	3.3000e-004	6.8000e-003	1.7700e-003	3.2000e-004	2.0900e-003		31.7158	31.7158	2.7900e-003		31.7857
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1352	0.1988	1.1077	3.6800e-003	0.3386	2.5700e-003	0.3411	0.0898	2.3900e-003	0.0922		369.2262	369.2262	0.0126		369.5415

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.3255	0.2351	2.6690	8.3400e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		830.7949	830.7949	0.0242		831.3991
Total	0.3325	0.4509	2.7237	8.8500e-003	0.8297	6.5200e-003	0.8362	0.2203	6.0400e-003	0.2264		885.1383	885.1383	0.0283		885.8457

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.3255	0.2351	2.6690	8.3400e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		830.7949	830.7949	0.0242		831.3991
Total	0.3325	0.4509	2.7237	8.8500e-003	0.8297	6.5200e-003	0.8362	0.2203	6.0400e-003	0.2264		885.1383	885.1383	0.0283		885.8457

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344
Total	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.3073	0.2139	2.5009	8.0500e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		802.8712	802.8712	0.0223		803.4298
Total	0.3131	0.4095	2.5503	8.5500e-003	0.8297	5.8200e-003	0.8356	0.2203	5.3700e-003	0.2257		856.7175	856.7175	0.0263		857.3750

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.3073	0.2139	2.5009	8.0500e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		802.8712	802.8712	0.0223		803.4298
Total	0.3131	0.4095	2.5503	8.5500e-003	0.8297	5.8200e-003	0.8356	0.2203	5.3700e-003	0.2257		856.7175	856.7175	0.0263		857.3750

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Unmitigated	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Total	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Total	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Morena Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

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tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5370	1.1000e-004	0.0122	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005	0.0000	0.0277

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5364	6.0000e-005	7.0400e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005	0.0000	0.0147

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.45	42.06	0.00	0.00	50.00	50.00	0.00	50.00	50.00	0.00	46.09	46.09	57.14	0.00	46.85

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1043	0.0250	2.8000e-004	6.4700e-003	3.4000e-004	6.8100e-003	1.7700e-003	3.2000e-004	2.1000e-003		31.1717	31.1717	2.8900e-003		31.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1564	0.2115	1.0263	3.4600e-003	0.3386	2.5800e-003	0.3412	0.0898	2.3900e-003	0.0922		347.8751	347.8751	0.0121		348.1775

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1043	0.0250	2.8000e-004	6.4700e-003	3.4000e-004	6.8100e-003	1.7700e-003	3.2000e-004	2.1000e-003		31.1717	31.1717	2.8900e-003		31.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1564	0.2115	1.0263	3.4600e-003	0.3386	2.5800e-003	0.3412	0.0898	2.3900e-003	0.0922		347.8751	347.8751	0.0121		348.1775

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.3775	0.2639	2.4648	7.8200e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		779.5776	779.5776	0.0227		780.1441
Total	0.3848	0.4791	2.5258	8.3100e-003	0.8297	6.5500e-003	0.8363	0.2203	6.0600e-003	0.2264		832.4054	832.4054	0.0271		833.0819

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.3775	0.2639	2.4648	7.8200e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		779.5776	779.5776	0.0227		780.1441
Total	0.3848	0.4791	2.5258	8.3100e-003	0.8297	6.5500e-003	0.8363	0.2203	6.0600e-003	0.2264		832.4054	832.4054	0.0271		833.0819

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344
Total	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.3569	0.2400	2.3036	7.5600e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		753.3624	753.3624	0.0209		753.8854
Total	0.3630	0.4348	2.3589	8.0500e-003	0.8297	5.8400e-003	0.8356	0.2203	5.3900e-003	0.2257		805.7022	805.7022	0.0251		806.3306

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.3569	0.2400	2.3036	7.5600e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		753.3624	753.3624	0.0209		753.8854
Total	0.3630	0.4348	2.3589	8.0500e-003	0.8297	5.8400e-003	0.8356	0.2203	5.3900e-003	0.2257		805.7022	805.7022	0.0251		806.3306

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Unmitigated	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Total	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Total	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Landfill Gas Pipeline-Trenchless
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	NumDays	1.00	120.00
tblConstructionPhase	NumDays	1.00	120.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

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tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	21.00	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0125	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.49	0.00	33.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	57.14

3.0 Construction Detail

Construction Phase

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	3/2/2020	3/27/2020	5	20	
2	Portal Excavation	Site Preparation	3/30/2020	9/11/2020	5	120	
3	Site Restoration	Site Preparation	9/14/2020	2/26/2021	5	120	
4	Tunnel Excavation	Trenching	3/1/2021	10/5/2021	5	157	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Site Preparation at Portal Sites - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.2018	0.1155	2.5000e-004		7.9400e-003	7.9400e-003		7.3000e-003	7.3000e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445
Total	0.0168	0.2018	0.1155	2.5000e-004	0.0000	7.9400e-003	7.9400e-003	0.0000	7.3000e-003	7.3000e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936
Total	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936

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3.2 Site Preparation at Portal Sites - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7800e-003	0.1199	0.1395	2.5000e-004		5.1100e-003	5.1100e-003		5.1400e-003	5.1400e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445
Total	5.7800e-003	0.1199	0.1395	2.5000e-004	0.0000	5.1100e-003	5.1100e-003	0.0000	5.1400e-003	5.1400e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936
Total	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936

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3.3 Portal Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2590	0.0000	0.2590	0.1423	0.0000	0.1423	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1504	1.4067	1.0001	1.6300e-003		0.0798	0.0798		0.0746	0.0746	0.0000	142.5861	142.5861	0.0371	0.0000	143.5134
Total	0.1504	1.4067	1.0001	1.6300e-003	0.2590	0.0798	0.3388	0.1423	0.0746	0.2169	0.0000	142.5861	142.5861	0.0371	0.0000	143.5134

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229
Total	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229

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3.3 Portal Excavation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1165	0.0000	0.1165	0.0641	0.0000	0.0641	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.7938	1.0607	1.6300e-003		0.0448	0.0448		0.0450	0.0450	0.0000	142.5860	142.5860	0.0371	0.0000	143.5132
Total	0.0361	0.7938	1.0607	1.6300e-003	0.1165	0.0448	0.1614	0.0641	0.0450	0.1090	0.0000	142.5860	142.5860	0.0371	0.0000	143.5132

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229
Total	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229

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3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2800e-003	0.0832	0.0901	1.2000e-004		5.2600e-003	5.2600e-003		4.8400e-003	4.8400e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648
Total	8.2800e-003	0.0832	0.0901	1.2000e-004	0.0000	5.2600e-003	5.2600e-003	0.0000	4.8400e-003	4.8400e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648
Total	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648

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3.4 Site Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6800e-003	0.0649	0.0931	1.2000e-004		4.6900e-003	4.6900e-003		4.7900e-003	4.7900e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648
Total	1.6800e-003	0.0649	0.0931	1.2000e-004	0.0000	4.6900e-003	4.6900e-003	0.0000	4.7900e-003	4.7900e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648
Total	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648

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3.4 Site Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8400e-003	0.0389	0.0463	6.0000e-005		2.2900e-003	2.2900e-003		2.1100e-003	2.1100e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412
Total	3.8400e-003	0.0389	0.0463	6.0000e-005	0.0000	2.2900e-003	2.2900e-003	0.0000	2.1100e-003	2.1100e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851
Total	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851

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3.4 Site Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9000e-004	0.0347	0.0484	6.0000e-005		2.5400e-003	2.5400e-003		2.5900e-003	2.5900e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412
Total	9.9000e-004	0.0347	0.0484	6.0000e-005	0.0000	2.5400e-003	2.5400e-003	0.0000	2.5900e-003	2.5900e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851
Total	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851

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3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1851	1.7292	1.2965	2.1300e-003		0.0951	0.0951		0.0888	0.0888	0.0000	186.5733	186.5733	0.0483	0.0000	187.7804
Total	0.1851	1.7292	1.2965	2.1300e-003		0.0951	0.0951		0.0888	0.0888	0.0000	186.5733	186.5733	0.0483	0.0000	187.7804

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0155	4.1100e-003	4.0000e-005	9.4000e-004	3.0000e-005	9.7000e-004	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	3.7896	3.7896	2.9000e-004	0.0000	3.7968
Worker	9.9900e-003	7.5300e-003	0.0740	2.4000e-004	0.0255	1.7000e-004	0.0256	6.7600e-003	1.6000e-004	6.9200e-003	0.0000	22.0148	22.0148	6.1000e-004	0.0000	22.0301
Total	0.0105	0.0230	0.0781	2.8000e-004	0.0264	2.0000e-004	0.0266	7.0300e-003	1.9000e-004	7.2200e-003	0.0000	25.8044	25.8044	9.0000e-004	0.0000	25.8269

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3.5 Tunnel Excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0477	1.0426	1.3881	2.1300e-003		0.0591	0.0591		0.0593	0.0593	0.0000	186.5731	186.5731	0.0483	0.0000	187.7802
Total	0.0477	1.0426	1.3881	2.1300e-003		0.0591	0.0591		0.0593	0.0593	0.0000	186.5731	186.5731	0.0483	0.0000	187.7802

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0155	4.1100e-003	4.0000e-005	9.4000e-004	3.0000e-005	9.7000e-004	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	3.7896	3.7896	2.9000e-004	0.0000	3.7968
Worker	9.9900e-003	7.5300e-003	0.0740	2.4000e-004	0.0255	1.7000e-004	0.0256	6.7600e-003	1.6000e-004	6.9200e-003	0.0000	22.0148	22.0148	6.1000e-004	0.0000	22.0301
Total	0.0105	0.0230	0.0781	2.8000e-004	0.0264	2.0000e-004	0.0266	7.0300e-003	1.9000e-004	7.2200e-003	0.0000	25.8044	25.8044	9.0000e-004	0.0000	25.8269

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

Landfill Gas Pipeline-Trenchless
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	NumDays	1.00	120.00
tblConstructionPhase	NumDays	1.00	120.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	21.00	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0739	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000	0.0000	8.1000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0684	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000	0.0000	4.3000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.51	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.05	46.05	0.00	0.00	46.91

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	3/2/2020	3/27/2020	5	20	
2	Portal Excavation	Site Preparation	3/30/2020	9/11/2020	5	120	
3	Site Restoration	Site Preparation	9/14/2020	2/26/2021	5	120	
4	Tunnel Excavation	Trenching	3/1/2021	10/5/2021	5	157	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.6782	20.1828	11.5528	0.0249		0.7937	0.7937		0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	1.6782	20.1828	11.5528	0.0249	0.0000	0.7937	0.7937	0.0000	0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0294	0.3336	1.0400e-003	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		103.8494	103.8494	3.0200e-003		103.9249
Total	0.0407	0.0294	0.3336	1.0400e-003	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		103.8494	103.8494	3.0200e-003		103.9249

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5777	11.9870	13.9515	0.0249		0.5110	0.5110		0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	0.5777	11.9870	13.9515	0.0249	0.0000	0.5110	0.5110	0.0000	0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0294	0.3336	1.0400e-003	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		103.8494	103.8494	3.0200e-003		103.9249
Total	0.0407	0.0294	0.3336	1.0400e-003	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		103.8494	103.8494	3.0200e-003		103.9249

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3158	0.0000	4.3158	2.3723	0.0000	2.3723			0.0000			0.0000
Off-Road	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069
Total	2.5068	23.4458	16.6677	0.0272	4.3158	1.3301	5.6459	2.3723	1.2430	3.6153		2,619.5716	2,619.5716	0.6814		2,636.6069

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9421	0.0000	1.9421	1.0676	0.0000	1.0676			0.0000			0.0000
Off-Road	0.6016	13.2298	17.6778	0.0272		0.7472	0.7472		0.7498	0.7498	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069
Total	0.6016	13.2298	17.6778	0.0272	1.9421	0.7472	2.6893	1.0676	0.7498	1.8174	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0426	1.6417	2.3577	3.1100e-003		0.1186	0.1186		0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0426	1.6417	2.3577	3.1100e-003	0.0000	0.1186	0.1186	0.0000	0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003	0.0000	0.1118	0.1118	0.0000	0.1028	0.1028		300.9001	300.9001	0.0973		303.3330

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0134	0.1563	5.0000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		50.1795	50.1795	1.4000e-003		50.2144
Total	0.0192	0.0134	0.1563	5.0000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		50.1795	50.1795	1.4000e-003		50.2144

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0481	1.6940	2.3625	3.1100e-003		0.1240	0.1240		0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330
Total	0.0481	1.6940	2.3625	3.1100e-003	0.0000	0.1240	0.1240	0.0000	0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0192	0.0134	0.1563	5.0000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		50.1795	50.1795	1.4000e-003		50.2144
Total	0.0192	0.0134	0.1563	5.0000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		50.1795	50.1795	1.4000e-003		50.2144

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3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471
Total	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.1249	0.0869	1.0160	3.2700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		326.1664	326.1664	9.0800e-003		326.3934
Total	0.1306	0.2825	1.0654	3.7700e-003	0.3444	2.6000e-003	0.3470	0.0916	2.4000e-003	0.0940		380.0127	380.0127	0.0130		380.3386

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.5 Tunnel Excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471
Total	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.1249	0.0869	1.0160	3.2700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		326.1664	326.1664	9.0800e-003		326.3934
Total	0.1306	0.2825	1.0654	3.7700e-003	0.3444	2.6000e-003	0.3470	0.0916	2.4000e-003	0.0940		380.0127	380.0127	0.0130		380.3386

4.0 Operational Detail - Mobile

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Unmitigated	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Total	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0684					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Total	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004

7.0 Water Detail

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Landfill Gas Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	NumDays	1.00	120.00
tblConstructionPhase	NumDays	1.00	120.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	21.00	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0739	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000	0.0000	8.1000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0684	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000	0.0000	4.3000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.51	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.05	46.05	0.00	0.00	46.91

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	3/2/2020	3/27/2020	5	20	
2	Portal Excavation	Site Preparation	3/30/2020	9/11/2020	5	120	
3	Site Restoration	Site Preparation	9/14/2020	2/26/2021	5	120	
4	Tunnel Excavation	Trenching	3/1/2021	10/5/2021	5	157	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.6782	20.1828	11.5528	0.0249		0.7937	0.7937		0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	1.6782	20.1828	11.5528	0.0249	0.0000	0.7937	0.7937	0.0000	0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180
Total	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5777	11.9870	13.9515	0.0249		0.5110	0.5110		0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	0.5777	11.9870	13.9515	0.0249	0.0000	0.5110	0.5110	0.0000	0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180
Total	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3158	0.0000	4.3158	2.3723	0.0000	2.3723			0.0000			0.0000
Off-Road	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069
Total	2.5068	23.4458	16.6677	0.0272	4.3158	1.3301	5.6459	2.3723	1.2430	3.6153		2,619.5716	2,619.5716	0.6814		2,636.6069

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9421	0.0000	1.9421	1.0676	0.0000	1.0676			0.0000			0.0000
Off-Road	0.6016	13.2298	17.6778	0.0272		0.7472	0.7472		0.7498	0.7498	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069
Total	0.6016	13.2298	17.6778	0.0272	1.9421	0.7472	2.6893	1.0676	0.7498	1.8174	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0426	1.6417	2.3577	3.1100e-003		0.1186	0.1186		0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0426	1.6417	2.3577	3.1100e-003	0.0000	0.1186	0.1186	0.0000	0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003	0.0000	0.1118	0.1118	0.0000	0.1028	0.1028		300.9001	300.9001	0.0973		303.3330

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178
Total	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0481	1.6940	2.3625	3.1100e-003		0.1240	0.1240		0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330
Total	0.0481	1.6940	2.3625	3.1100e-003	0.0000	0.1240	0.1240	0.0000	0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178
Total	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471
Total	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471
Total	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

4.0 Operational Detail - Mobile

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Unmitigated	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Total	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0684					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Total	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004

7.0 Water Detail

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

MBC Improvements - San Diego County APCD Air District, Annual

MBC Improvements
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

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tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-24-2019	7-23-2019	0.3939	0.1475
2	7-24-2019	10-23-2019	0.5319	0.3283
3	10-24-2019	1-23-2020	0.5207	0.3284
4	1-24-2020	4-23-2020	0.4161	0.2769
		Highest	0.5319	0.3284

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	50.00

3.0 Construction Detail

Construction Phase

MBC Improvements - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0139	0.1377	0.0845	1.5000e-004		7.1100e-003	7.1100e-003		6.6800e-003	6.6800e-003	0.0000	13.2797	13.2797	3.2100e-003	0.0000	13.3599
Total	0.0139	0.1377	0.0845	1.5000e-004		7.1100e-003	7.1100e-003		6.6800e-003	6.6800e-003	0.0000	13.2797	13.2797	3.2100e-003	0.0000	13.3599

MBC Improvements - San Diego County APCD Air District, Annual

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618
Total	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4700e-003	0.0518	0.0875	1.5000e-004		3.6300e-003	3.6300e-003		3.5500e-003	3.5500e-003	0.0000	13.2796	13.2796	3.2100e-003	0.0000	13.3599
Total	4.4700e-003	0.0518	0.0875	1.5000e-004		3.6300e-003	3.6300e-003		3.5500e-003	3.5500e-003	0.0000	13.2796	13.2796	3.2100e-003	0.0000	13.3599

MBC Improvements - San Diego County APCD Air District, Annual

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618
Total	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	6.2100e-003	0.0000	6.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1024	0.1122	1.9000e-004		4.7300e-003	4.7300e-003		4.4200e-003	4.4200e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945
Total	0.0113	0.1024	0.1122	1.9000e-004	0.0113	4.7300e-003	0.0160	6.2100e-003	4.4200e-003	0.0106	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0800e-003	0.0000	5.0800e-003	2.7900e-003	0.0000	2.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113		0.1122	1.9000e-004		4.7300e-003	4.7300e-003		4.4200e-003	4.4200e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945
Total	0.0113		0.1122	1.9000e-004	5.0800e-003	4.7300e-003	9.8100e-003	2.7900e-003	4.4200e-003	7.2100e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1082	0.9282	0.6873	1.2300e-003		0.0500	0.0500		0.0478	0.0478	0.0000	104.5673	104.5673	0.0214	0.0000	105.1015
Total	0.1082	0.9282	0.6873	1.2300e-003		0.0500	0.0500		0.0478	0.0478	0.0000	104.5673	104.5673	0.0214	0.0000	105.1015

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1000e-004	0.0164	4.4200e-003	4.0000e-005	8.7000e-004	1.1000e-004	9.8000e-004	2.5000e-004	1.1000e-004	3.6000e-004	0.0000	3.4804	3.4804	2.8000e-004	0.0000	3.4874
Worker	4.1300e-003	3.1700e-003	0.0307	9.0000e-005	8.4000e-003	6.0000e-005	8.4700e-003	2.2300e-003	6.0000e-005	2.2900e-003	0.0000	7.8442	7.8442	2.5000e-004	0.0000	7.8506
Total	4.7400e-003	0.0196	0.0351	1.3000e-004	9.2700e-003	1.7000e-004	9.4500e-003	2.4800e-003	1.7000e-004	2.6500e-003	0.0000	11.3246	11.3246	5.3000e-004	0.0000	11.3379

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0298	0.6006	0.7184	1.2300e-003		0.0353	0.0353		0.0353	0.0353	0.0000	104.5671	104.5671	0.0214	0.0000	105.1013
Total	0.0298	0.6006	0.7184	1.2300e-003		0.0353	0.0353		0.0353	0.0353	0.0000	104.5671	104.5671	0.0214	0.0000	105.1013

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1000e-004	0.0164	4.4200e-003	4.0000e-005	8.7000e-004	1.1000e-004	9.8000e-004	2.5000e-004	1.1000e-004	3.6000e-004	0.0000	3.4804	3.4804	2.8000e-004	0.0000	3.4874
Worker	4.1300e-003	3.1700e-003	0.0307	9.0000e-005	8.4000e-003	6.0000e-005	8.4700e-003	2.2300e-003	6.0000e-005	2.2900e-003	0.0000	7.8442	7.8442	2.5000e-004	0.0000	7.8506
Total	4.7400e-003	0.0196	0.0351	1.3000e-004	9.2700e-003	1.7000e-004	9.4500e-003	2.4800e-003	1.7000e-004	2.6500e-003	0.0000	11.3246	11.3246	5.3000e-004	0.0000	11.3379

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0513	0.4473	0.3530	6.5000e-004		0.0229	0.0229		0.0219	0.0219	0.0000	54.4767	54.4767	0.0110	0.0000	54.7515
Total	0.0513	0.4473	0.3530	6.5000e-004		0.0229	0.0229		0.0219	0.0219	0.0000	54.4767	54.4767	0.0110	0.0000	54.7515

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	7.8600e-003	2.0900e-003	2.0000e-005	4.6000e-004	4.0000e-005	5.0000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8206	1.8206	1.4000e-004	0.0000	1.8241
Worker	2.0300e-003	1.5100e-003	0.0148	4.0000e-005	4.4300e-003	3.0000e-005	4.4600e-003	1.1800e-003	3.0000e-005	1.2100e-003	0.0000	4.0013	4.0013	1.2000e-004	0.0000	4.0043
Total	2.2900e-003	9.3700e-003	0.0148	6.0000e-005	4.8900e-003	7.0000e-005	4.9600e-003	1.3100e-003	7.0000e-005	1.3800e-003	0.0000	5.8220	5.8220	2.6000e-004	0.0000	5.8285

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0157	0.3164	0.3784	6.5000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	54.4766	54.4766	0.0110	0.0000	54.7514
Total	0.0157	0.3164	0.3784	6.5000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	54.4766	54.4766	0.0110	0.0000	54.7514

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	7.8600e-003	2.0900e-003	2.0000e-005	4.6000e-004	4.0000e-005	5.0000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8206	1.8206	1.4000e-004	0.0000	1.8241
Worker	2.0300e-003	1.5100e-003	0.0148	4.0000e-005	4.4300e-003	3.0000e-005	4.4600e-003	1.1800e-003	3.0000e-005	1.2100e-003	0.0000	4.0013	4.0013	1.2000e-004	0.0000	4.0043
Total	2.2900e-003	9.3700e-003	0.0148	6.0000e-005	4.8900e-003	7.0000e-005	4.9600e-003	1.3100e-003	7.0000e-005	1.3800e-003	0.0000	5.8220	5.8220	2.6000e-004	0.0000	5.8285

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3600e-003	0.0245	0.0255	4.0000e-005		1.3100e-003	1.3100e-003		1.2100e-003	1.2100e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3600e-003	0.0245	0.0255	4.0000e-005		1.3100e-003	1.3100e-003		1.2100e-003	1.2100e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161

MBC Improvements - San Diego County APCD Air District, Annual

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570
Total	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	0.0130	0.0282	4.0000e-005		1.1100e-003	1.1100e-003		1.0800e-003	1.0800e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.3500e-003	0.0130	0.0282	4.0000e-005		1.1100e-003	1.1100e-003		1.0800e-003	1.0800e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570
Total	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MBC Improvements - San Diego County APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

MBC Improvements - San Diego County APCD Air District, Annual

MBC Improvements - San Diego County APCD Air District, Summer

MBC Improvements
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

MBC Improvements - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

MBC Improvements - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

MBC Improvements - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

MBC Improvements - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	100.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MBC Improvements - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

MBC Improvements - San Diego County APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4
Total	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4

MBC Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684
Total	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684

MBC Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129	0.7528	0.3153	1.0681	0.4138	0.2945	0.7083		1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.7514		7.4816	0.0129		0.3153	0.3153		0.2945	0.2945	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514		7.4816	0.0129	0.3387	0.3153	0.6541	0.1862	0.2945	0.4807	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714
Total	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664
Total	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

MBC Improvements - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

MBC Improvements - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

MBC Improvements - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

MBC Improvements - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

MBC Improvements - San Diego County APCD Air District, Winter

MBC Improvements
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

MBC Improvements - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

MBC Improvements - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

MBC Improvements - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

MBC Improvements - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	100.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MBC Improvements - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

MBC Improvements - San Diego County APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4
Total	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4

MBC Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684
Total	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684

MBC Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129	0.7528	0.3153	1.0681	0.4138	0.2945	0.7083		1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.7514		7.4816	0.0129		0.3153	0.3153		0.2945	0.2945	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514		7.4816	0.0129	0.3387	0.3153	0.6541	0.1862	0.2945	0.4807	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714
Total	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664
Total	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

MBC Improvements - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

MBC Improvements - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

MBC Improvements - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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MBC Improvements - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Miramar Water Treatment Plant Improvements
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	2

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - There are no coatings for this project.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

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Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	500	0
tblAreaCoating	Area_Nonresidential_Interior	1500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00

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tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	1.24	1.16
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	50.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	41,600.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-24-2020	9-30-2020	0.4176	0.2781
		Highest	0.4176	0.2781

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.2355	0.0000	0.2355	0.0139	0.0000	0.5834
Water						0.0000	0.0000		0.0000	0.0000	0.0132	0.1770	0.1902	1.3600e-003	3.0000e-005	0.2343
Total	3.9100e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2487	0.1770	0.4257	0.0153	3.0000e-005	0.8177

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.6100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.2355	0.0000	0.2355	0.0139	0.0000	0.5834
Water						0.0000	0.0000		0.0000	0.0000	0.0132	0.1770	0.1902	1.3600e-003	3.0000e-005	0.2343
Total	3.6100e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2487	0.1770	0.4257	0.0153	3.0000e-005	0.8177

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/24/2020	8/6/2020	5	10	
2	Building Construction	Building Construction	8/7/2020	10/29/2020	5	60	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	50.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

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3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

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3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0419	0.3927	0.3099	5.2000e-004		0.0206	0.0206		0.0191	0.0191	0.0000	44.4090	44.4090	0.0134	0.0000	44.7433
Total	0.0419	0.3927	0.3099	5.2000e-004		0.0206	0.0206		0.0191	0.0191	0.0000	44.4090	44.4090	0.0134	0.0000	44.7433

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1400e-003	0.0342	9.0900e-003	8.0000e-005	1.9900e-003	1.7000e-004	2.1600e-003	5.7000e-004	1.6000e-004	7.3000e-004	0.0000	7.9158	7.9158	6.1000e-004	0.0000	7.9310
Worker	5.5300e-003	4.0900e-003	0.0401	1.2000e-004	0.0120	9.0000e-005	0.0121	3.2000e-003	8.0000e-005	3.2800e-003	0.0000	10.8731	10.8731	3.3000e-004	0.0000	10.8813
Total	6.6700e-003	0.0383	0.0492	2.0000e-004	0.0140	2.6000e-004	0.0143	3.7700e-003	2.4000e-004	4.0100e-003	0.0000	18.7890	18.7890	9.4000e-004	0.0000	18.8123

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.2832	0.3399	5.2000e-004		0.0167	0.0167		0.0167	0.0167	0.0000	44.4090	44.4090	0.0134	0.0000	44.7433
Total	0.0140	0.2832	0.3399	5.2000e-004		0.0167	0.0167		0.0167	0.0167	0.0000	44.4090	44.4090	0.0134	0.0000	44.7433

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1400e-003	0.0342	9.0900e-003	8.0000e-005	1.9900e-003	1.7000e-004	2.1600e-003	5.7000e-004	1.6000e-004	7.3000e-004	0.0000	7.9158	7.9158	6.1000e-004	0.0000	7.9310
Worker	5.5300e-003	4.0900e-003	0.0401	1.2000e-004	0.0120	9.0000e-005	0.0121	3.2000e-003	8.0000e-005	3.2800e-003	0.0000	10.8731	10.8731	3.3000e-004	0.0000	10.8813
Total	6.6700e-003	0.0383	0.0492	2.0000e-004	0.0140	2.6000e-004	0.0143	3.7700e-003	2.4000e-004	4.0100e-003	0.0000	18.7890	18.7890	9.4000e-004	0.0000	18.8123

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.6100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	3.9100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	3.6100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.1902	1.3600e-003	3.0000e-005	0.2343
Unmitigated	0.1902	1.3600e-003	3.0000e-005	0.2343

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0416 / 0	0.1902	1.3600e-003	3.0000e-005	0.2343
Total		0.1902	1.3600e-003	3.0000e-005	0.2343

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0416 / 0	0.1902	1.3600e-003	3.0000e-005	0.2343
Total		0.1902	1.3600e-003	3.0000e-005	0.2343

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2355	0.0139	0.0000	0.5834
Unmitigated	0.2355	0.0139	0.0000	0.5834

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.16	0.2355	0.0139	0.0000	0.5834
Total		0.2355	0.0139	0.0000	0.5834

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1.16	0.2355	0.0139	0.0000	0.5834
Total		0.2355	0.0139	0.0000	0.5834

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

Miramar Water Treatment Plant Improvements
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	2

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - There are no coatings for this project.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	500	0
tblAreaCoating	Area_Nonresidential_Interior	1500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	1.24	1.16
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	50.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	41,600.00

2.0 Emissions Summary

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0214	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0198	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.52	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/24/2020	8/6/2020	5	10	
2	Building Construction	Building Construction	8/7/2020	10/29/2020	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	50.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3967	13.0903	10.3300	0.0173		0.6859	0.6859		0.6380	0.6380		1,631.7530	1,631.7530	0.4913		1,644.0357
Total	1.3967	13.0903	10.3300	0.0173		0.6859	0.6859		0.6380	0.6380		1,631.7530	1,631.7530	0.4913		1,644.0357

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.1835	0.1236	1.4173	4.2300e-003	0.4107	2.8800e-003	0.4136	0.1090	2.6600e-003	0.1116		421.3735	421.3735	0.0126		421.6881
Total	0.2209	1.2512	1.7046	6.9700e-003	0.4784	8.4000e-003	0.4868	0.1284	7.9400e-003	0.1364		715.4136	715.4136	0.0343		716.2704

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4670	9.4389	11.3307	0.0173		0.5571	0.5571		0.5571	0.5571	0.0000	1,631.7530	1,631.7530	0.4913		1,644.0357
Total	0.4670	9.4389	11.3307	0.0173		0.5571	0.5571		0.5571	0.5571	0.0000	1,631.7530	1,631.7530	0.4913		1,644.0357

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0374	1.1276	0.2873	2.7400e-003	0.0677	5.5200e-003	0.0732	0.0195	5.2800e-003	0.0248		294.0401	294.0401	0.0217		294.5824
Worker	0.1835	0.1236	1.4173	4.2300e-003	0.4107	2.8800e-003	0.4136	0.1090	2.6600e-003	0.1116		421.3735	421.3735	0.0126		421.6881
Total	0.2209	1.2512	1.7046	6.9700e-003	0.4784	8.4000e-003	0.4868	0.1284	7.9400e-003	0.1364		715.4136	715.4136	0.0343		716.2704

4.0 Operational Detail - Mobile

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

Miramar Water Treatment Plant Improvements
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	2

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - There are no coatings for this project.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	500	0
tblAreaCoating	Area_Nonresidential_Interior	1500	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	2.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	1.24	1.16
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	50.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	41,600.00

2.0 Emissions Summary

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0214	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0198	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.52	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/24/2020	8/6/2020	5	10	
2	Building Construction	Building Construction	8/7/2020	10/29/2020	5	60	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	1	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	50.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3967	13.0903	10.3300	0.0173		0.6859	0.6859		0.6380	0.6380		1,631.7530	1,631.7530	0.4913		1,644.0357
Total	1.3967	13.0903	10.3300	0.0173		0.6859	0.6859		0.6380	0.6380		1,631.7530	1,631.7530	0.4913		1,644.0357

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.2078	0.1388	1.3362	3.9700e-003	0.4107	2.8800e-003	0.4136	0.1090	2.6600e-003	0.1116		395.5660	395.5660	0.0119		395.8637
Total	0.2469	1.2655	1.6550	6.6400e-003	0.4784	8.5000e-003	0.4869	0.1284	8.0400e-003	0.1365		682.0282	682.0282	0.0350		682.9022

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4670	9.4389	11.3307	0.0173		0.5571	0.5571		0.5571	0.5571	0.0000	1,631.7530	1,631.7530	0.4913		1,644.0357
Total	0.4670	9.4389	11.3307	0.0173		0.5571	0.5571		0.5571	0.5571	0.0000	1,631.7530	1,631.7530	0.4913		1,644.0357

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0391	1.1267	0.3188	2.6700e-003	0.0677	5.6200e-003	0.0733	0.0195	5.3800e-003	0.0249		286.4622	286.4622	0.0231		287.0385
Worker	0.2078	0.1388	1.3362	3.9700e-003	0.4107	2.8800e-003	0.4136	0.1090	2.6600e-003	0.1116		395.5660	395.5660	0.0119		395.8637
Total	0.2469	1.2655	1.6550	6.6400e-003	0.4784	8.5000e-003	0.4869	0.1284	8.0400e-003	0.1365		682.0282	682.0282	0.0350		682.9022

4.0 Operational Detail - Mobile

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0214	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0198					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0198	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

Miramar Water Treatment Plant Improvements - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

Morena Pipeline-Open Trench
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	637.91	1000sqft	14.64	637,908.36	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

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Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

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Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	318954	0
tblAreaCoating	Area_Nonresidential_Interior	956862	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	200.00

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tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	637,910.00	637,908.36
tblLandUse	LandUseSquareFeet	637,910.00	637,908.36
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	791.01	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,154.00
tblTripsAndVMT	VendorTripNumber	105.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00

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tblTripsAndVMT	WorkerTripNumber	268.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	147,516,687.50	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4862	5.3617	3.1760	6.8800e-003	0.0888	0.2631	0.3519	0.0221	0.2421	0.2643	0.0000	636.1861	636.1861	0.1484	0.0000	639.8970
2020	0.2215	2.2988	1.6895	3.1900e-003	0.0741	0.1175	0.1916	0.0172	0.1081	0.1253	0.0000	281.5465	281.5465	0.0820	0.0000	283.5962
2021	0.0947	0.9215	1.0816	1.7500e-003	0.0142	0.0482	0.0624	3.7600e-003	0.0444	0.0481	0.0000	154.4199	154.4199	0.0463	0.0000	155.5779
Maximum	0.4862	5.3617	3.1760	6.8800e-003	0.0888	0.2631	0.3519	0.0221	0.2421	0.2643	0.0000	636.1861	636.1861	0.1484	0.0000	639.8970

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1481	3.1085	3.3496	6.8800e-003	0.0816	0.1299	0.2115	0.0212	0.1298	0.1510	0.0000	636.1856	636.1856	0.1484	0.0000	639.8965
2020	0.0817	1.4871	1.9706	3.1900e-003	0.0669	0.0778	0.1446	0.0163	0.0777	0.0940	0.0000	281.5462	281.5462	0.0820	0.0000	283.5959
2021	0.0454	0.8062	1.2692	1.7500e-003	0.0142	0.0434	0.0575	3.7600e-003	0.0434	0.0471	0.0000	154.4198	154.4198	0.0463	0.0000	155.5778
Maximum	0.1481	3.1085	3.3496	6.8800e-003	0.0816	0.1299	0.2115	0.0212	0.1298	0.1510	0.0000	636.1856	636.1856	0.1484	0.0000	639.8965

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	65.69	37.06	-10.80	0.00	8.18	41.44	31.72	4.22	36.42	33.25	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-2-2019	7-1-2019	1.9337	1.0744
2	7-2-2019	10-1-2019	1.9550	1.0862
3	10-2-2019	1-1-2020	1.9575	1.0900
4	1-2-2020	4-1-2020	0.7007	0.4134
5	4-2-2020	7-1-2020	0.6359	0.3752
6	7-2-2020	10-1-2020	0.6429	0.3793
7	10-2-2020	1-1-2021	0.5273	0.3931
8	1-2-2021	4-1-2021	0.4604	0.3859
9	4-2-2021	7-1-2021	0.4649	0.3896
10	7-2-2021	9-30-2021	0.0920	0.0771
		Highest	1.9575	1.0900

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4919	5.0000e-005	5.8800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0114	0.0114	3.0000e-005	0.0000	0.0122
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4919	5.0000e-005	5.8800e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0114	0.0114	3.0000e-005	0.0000	0.0122

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4916	3.0000e-005	3.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1400e-003	6.1400e-003	1.0000e-005	0.0000	6.4600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4916	3.0000e-005	3.4100e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	6.1400e-003	6.1400e-003	1.0000e-005	0.0000	6.4600e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	40.00	42.01	0.00	0.00	50.00	50.00	0.00	50.00	50.00	0.00	46.14	46.14	66.67	0.00	46.88

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	4/2/2019	1/6/2020	5	200	
2	Building Construction	Building Construction	1/7/2020	10/12/2020	5	200	Pipeline installation and backfill.
3	Paving	Paving	10/13/2020	7/19/2021	5	200	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	5,154.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0132	0.0000	0.0132	1.6600e-003	0.0000	1.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4499	4.5763	2.8992	4.5600e-003		0.2600	0.2600		0.2392	0.2392	0.0000	409.9353	409.9353	0.1297	0.0000	413.1778
Total	0.4499	4.5763	2.8992	4.5600e-003	0.0132	0.2600	0.2731	1.6600e-003	0.2392	0.2408	0.0000	409.9353	409.9353	0.1297	0.0000	413.1778

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3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0222	0.7739	0.1688	1.9900e-003	0.0439	2.8900e-003	0.0468	0.0120	2.7700e-003	0.0148	0.0000	196.8835	196.8835	0.0178	0.0000	197.3291
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	0.0115	0.1079	3.2000e-004	0.0318	2.2000e-004	0.0320	8.4400e-003	2.1000e-004	8.6500e-003	0.0000	29.3673	29.3673	9.1000e-004	0.0000	29.3901
Total	0.0363	0.7854	0.2768	2.3100e-003	0.0757	3.1100e-003	0.0788	0.0205	2.9800e-003	0.0235	0.0000	226.2508	226.2508	0.0187	0.0000	226.7193

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9300e-003	0.0000	5.9300e-003	7.5000e-004	0.0000	7.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1118	2.3232	3.0728	4.5600e-003		0.1268	0.1268		0.1268	0.1268	0.0000	409.9348	409.9348	0.1297	0.0000	413.1773
Total	0.1118	2.3232	3.0728	4.5600e-003	5.9300e-003	0.1268	0.1328	7.5000e-004	0.1268	0.1276	0.0000	409.9348	409.9348	0.1297	0.0000	413.1773

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3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0222	0.7739	0.1688	1.9900e-003	0.0439	2.8900e-003	0.0468	0.0120	2.7700e-003	0.0148	0.0000	196.8835	196.8835	0.0178	0.0000	197.3291
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	0.0115	0.1079	3.2000e-004	0.0318	2.2000e-004	0.0320	8.4400e-003	2.1000e-004	8.6500e-003	0.0000	29.3673	29.3673	9.1000e-004	0.0000	29.3901
Total	0.0363	0.7854	0.2768	2.3100e-003	0.0757	3.1100e-003	0.0788	0.0205	2.9800e-003	0.0235	0.0000	226.2508	226.2508	0.0187	0.0000	226.7193

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0132	0.0000	0.0132	1.6600e-003	0.0000	1.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6500e-003	0.0870	0.0584	9.0000e-005		4.8900e-003	4.8900e-003		4.5000e-003	4.5000e-003	0.0000	8.1858	8.1858	2.6500e-003	0.0000	8.2519
Total	8.6500e-003	0.0870	0.0584	9.0000e-005	0.0132	4.8900e-003	0.0181	1.6600e-003	4.5000e-003	6.1600e-003	0.0000	8.1858	8.1858	2.6500e-003	0.0000	8.2519

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3.2 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0147	3.3600e-003	4.0000e-005	0.0334	5.0000e-005	0.0334	8.2100e-003	4.0000e-005	8.2600e-003	0.0000	3.9750	3.9750	3.6000e-004	0.0000	3.9840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	2.0200e-003	1.0000e-005	6.5000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5804	0.5804	2.0000e-005	0.0000	0.5808
Total	6.8000e-004	0.0149	5.3800e-003	5.0000e-005	0.0340	5.0000e-005	0.0341	8.3800e-003	4.0000e-005	8.4400e-003	0.0000	4.5554	4.5554	3.8000e-004	0.0000	4.5648

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.9300e-003	0.0000	5.9300e-003	7.5000e-004	0.0000	7.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2800e-003	0.0474	0.0627	9.0000e-005		2.5900e-003	2.5900e-003		2.5900e-003	2.5900e-003	0.0000	8.1857	8.1857	2.6500e-003	0.0000	8.2519
Total	2.2800e-003	0.0474	0.0627	9.0000e-005	5.9300e-003	2.5900e-003	8.5200e-003	7.5000e-004	2.5900e-003	3.3400e-003	0.0000	8.1857	8.1857	2.6500e-003	0.0000	8.2519

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3.2 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.1000e-004	0.0147	3.3600e-003	4.0000e-005	0.0334	5.0000e-005	0.0334	8.2100e-003	4.0000e-005	8.2600e-003	0.0000	3.9750	3.9750	3.6000e-004	0.0000	3.9840
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.1000e-004	2.0200e-003	1.0000e-005	6.5000e-004	0.0000	6.5000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5804	0.5804	2.0000e-005	0.0000	0.5808
Total	6.8000e-004	0.0149	5.3800e-003	5.0000e-005	0.0340	5.0000e-005	0.0341	8.3800e-003	4.0000e-005	8.4400e-003	0.0000	4.5554	4.5554	3.8000e-004	0.0000	4.5648

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1614	1.7588	1.1151	2.0800e-003		0.0904	0.0904		0.0832	0.0832	0.0000	182.8139	182.8139	0.0591	0.0000	184.2920
Total	0.1614	1.7588	1.1151	2.0800e-003		0.0904	0.0904		0.0832	0.0832	0.0000	182.8139	182.8139	0.0591	0.0000	184.2920

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0218	5.7800e-003	5.0000e-005	1.2000e-003	1.0000e-004	1.3000e-003	3.5000e-004	1.0000e-004	4.4000e-004	0.0000	4.8722	4.8722	3.9000e-004	0.0000	4.8818
Worker	8.2900e-003	6.4900e-003	0.0620	2.0000e-004	0.0200	1.4000e-004	0.0201	5.3000e-003	1.3000e-004	5.4300e-003	0.0000	17.8585	17.8585	5.2000e-004	0.0000	17.8714
Total	9.0100e-003	0.0283	0.0678	2.5000e-004	0.0212	2.4000e-004	0.0214	5.6500e-003	2.3000e-004	5.8700e-003	0.0000	22.7307	22.7307	9.1000e-004	0.0000	22.7533

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0511	1.0671	1.3151	2.0800e-003		0.0572	0.0572		0.0572	0.0572	0.0000	182.8137	182.8137	0.0591	0.0000	184.2918
Total	0.0511	1.0671	1.3151	2.0800e-003		0.0572	0.0572		0.0572	0.0572	0.0000	182.8137	182.8137	0.0591	0.0000	184.2918

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.2000e-004	0.0218	5.7800e-003	5.0000e-005	1.2000e-003	1.0000e-004	1.3000e-003	3.5000e-004	1.0000e-004	4.4000e-004	0.0000	4.8722	4.8722	3.9000e-004	0.0000	4.8818
Worker	8.2900e-003	6.4900e-003	0.0620	2.0000e-004	0.0200	1.4000e-004	0.0201	5.3000e-003	1.3000e-004	5.4300e-003	0.0000	17.8585	17.8585	5.2000e-004	0.0000	17.8714
Total	9.0100e-003	0.0283	0.0678	2.5000e-004	0.0212	2.4000e-004	0.0214	5.6500e-003	2.3000e-004	5.8700e-003	0.0000	22.7307	22.7307	9.1000e-004	0.0000	22.7533

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0393	0.4079	0.4249	6.6000e-004		0.0218	0.0218		0.0201	0.0201	0.0000	58.0818	58.0818	0.0188	0.0000	58.5515
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0393	0.4079	0.4249	6.6000e-004		0.0218	0.0218		0.0201	0.0201	0.0000	58.0818	58.0818	0.0188	0.0000	58.5515

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3.4 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-003	1.8800e-003	0.0180	6.0000e-005	5.7900e-003	4.0000e-005	5.8300e-003	1.5400e-003	4.0000e-005	1.5700e-003	0.0000	5.1790	5.1790	1.5000e-004	0.0000	5.1827
Total	2.4000e-003	1.8800e-003	0.0180	6.0000e-005	5.7900e-003	4.0000e-005	5.8300e-003	1.5400e-003	4.0000e-005	1.5700e-003	0.0000	5.1790	5.1790	1.5000e-004	0.0000	5.1827

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0163	0.3276	0.5016	6.6000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	58.0818	58.0818	0.0188	0.0000	58.5514
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0163	0.3276	0.5016	6.6000e-004		0.0177	0.0177		0.0177	0.0177	0.0000	58.0818	58.0818	0.0188	0.0000	58.5514

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3.4 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-003	1.8800e-003	0.0180	6.0000e-005	5.7900e-003	4.0000e-005	5.8300e-003	1.5400e-003	4.0000e-005	1.5700e-003	0.0000	5.1790	5.1790	1.5000e-004	0.0000	5.1827
Total	2.4000e-003	1.8800e-003	0.0180	6.0000e-005	5.7900e-003	4.0000e-005	5.8300e-003	1.5400e-003	4.0000e-005	1.5700e-003	0.0000	5.1790	5.1790	1.5000e-004	0.0000	5.1827

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0891	0.9173	1.0404	1.6200e-003		0.0481	0.0481		0.0443	0.0443	0.0000	142.1667	142.1667	0.0460	0.0000	143.3162
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0891	0.9173	1.0404	1.6200e-003		0.0481	0.0481		0.0443	0.0443	0.0000	142.1667	142.1667	0.0460	0.0000	143.3162

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3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5600e-003	4.1900e-003	0.0412	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7600e-003	9.0000e-005	3.8500e-003	0.0000	12.2532	12.2532	3.4000e-004	0.0000	12.2617
Total	5.5600e-003	4.1900e-003	0.0412	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7600e-003	9.0000e-005	3.8500e-003	0.0000	12.2532	12.2532	3.4000e-004	0.0000	12.2617

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0398	0.8020	1.2280	1.6200e-003		0.0433	0.0433		0.0433	0.0433	0.0000	142.1665	142.1665	0.0460	0.0000	143.3160
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0398	0.8020	1.2280	1.6200e-003		0.0433	0.0433		0.0433	0.0433	0.0000	142.1665	142.1665	0.0460	0.0000	143.3160

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3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5600e-003	4.1900e-003	0.0412	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7600e-003	9.0000e-005	3.8500e-003	0.0000	12.2532	12.2532	3.4000e-004	0.0000	12.2617
Total	5.5600e-003	4.1900e-003	0.0412	1.4000e-004	0.0142	1.0000e-004	0.0143	3.7600e-003	9.0000e-005	3.8500e-003	0.0000	12.2532	12.2532	3.4000e-004	0.0000	12.2617

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4916	3.0000e-005	3.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1400e-003	6.1400e-003	1.0000e-005	0.0000	6.4600e-003
Unmitigated	2.4919	5.0000e-005	5.8800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0114	0.0114	3.0000e-005	0.0000	0.0122

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4914					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.5000e-004	5.0000e-005	5.8800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0114	0.0114	3.0000e-005	0.0000	0.0122
Total	2.4919	5.0000e-005	5.8800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0114	0.0114	3.0000e-005	0.0000	0.0122

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4914					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	3.0000e-005	3.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1400e-003	6.1400e-003	1.0000e-005	0.0000	6.4600e-003
Total	2.4916	3.0000e-005	3.4100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1400e-003	6.1400e-003	1.0000e-005	0.0000	6.4600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Morena Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	637.91	1000sqft	14.64	637,908.36	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	318954	0
tblAreaCoating	Area_Nonresidential_Interior	956862	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	200.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	637,910.00	637,908.36
tblLandUse	LandUseSquareFeet	637,910.00	637,908.36
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	791.01	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,154.00
tblTripsAndVMT	VendorTripNumber	105.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblTripsAndVMT	WorkerTripNumber	268.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	147,516,687.50	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.9555	54.5431	32.4372	0.0705	0.9211	2.6841	3.6052	0.2298	2.4705	2.7002	0.0000	7,189.8216	7,189.8216	1.6671	0.0000	7,231.4985
2020	4.6624	50.7879	31.9068	0.0701	17.6088	2.4698	20.0787	4.3259	2.2731	6.5989	0.0000	7,055.8843	7,055.8843	1.6634	0.0000	7,097.4681
2021	1.3324	12.9726	15.2785	0.0248	0.2044	0.6791	0.8835	0.0542	0.6248	0.6790	0.0000	2,407.9287	2,407.9287	0.7195	0.0000	2,425.9147
Maximum	4.9555	54.5431	32.4372	0.0705	17.6088	2.6841	20.0787	4.3259	2.4705	6.5989	0.0000	7,189.8216	7,189.8216	1.6671	0.0000	7,231.4985

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.5063	31.5521	34.2093	0.0705	0.8486	1.3256	2.1743	0.2207	1.3242	1.5448	0.0000	7,189.8216	7,189.8216	1.6671	0.0000	7,231.4985
2020	1.4772	30.9902	34.0720	0.0701	17.5364	1.3193	18.8557	4.3167	1.3182	5.6349	0.0000	7,055.8843	7,055.8843	1.6634	0.0000	7,097.4681
2021	0.6378	11.3487	17.9209	0.0248	0.2044	0.6107	0.8151	0.0542	0.6106	0.6648	0.0000	2,407.9287	2,407.9287	0.7195	0.0000	2,425.9147
Maximum	1.5063	31.5521	34.2093	0.0705	17.5364	1.3256	18.8557	4.3167	1.3242	5.6349	0.0000	7,189.8216	7,189.8216	1.6671	0.0000	7,231.4985

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	66.93	37.54	-8.26	0.00	0.77	44.19	11.08	0.40	39.40	21.38	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.6574	6.0000e-004	0.0654	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004	0.0000	0.1489

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.6538	3.3000e-004	0.0379	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004	0.0000	0.0792

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.00	42.03	0.00	0.00	56.52	56.52	0.00	56.52	56.52	0.00	46.11	46.11	56.76	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	4/2/2019	1/6/2020	5	200	
2	Building Construction	Building Construction	1/7/2020	10/12/2020	5	200	Pipeline installation and backfill.
3	Paving	Paving	10/13/2020	7/19/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	5,154.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1317	0.0000	0.1317	0.0166	0.0000	0.0166			0.0000			0.0000
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465	0.1317	2.6526	2.7844	0.0166	2.4404	2.4570		4,610.9827	4,610.9827	1.4589		4,647.4543

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2237	7.7406	1.6709	0.0205	0.4573	0.0292	0.4865	0.1251	0.0280	0.1531		2,230.3232	2,230.3232	0.1974		2,235.2575
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.3650	7.8464	2.8537	0.0240	0.7894	0.0315	0.8209	0.2132	0.0301	0.2432		2,578.8389	2,578.8389	0.2082		2,584.0442

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0593	0.0000	0.0593	7.4600e-003	0.0000	7.4600e-003			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465	0.0593	1.2942	1.3534	7.4600e-003	1.2942	1.3016	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2237	7.7406	1.6709	0.0205	0.4573	0.0292	0.4865	0.1251	0.0280	0.1531		2,230.3232	2,230.3232	0.1974		2,235.2575
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.3650	7.8464	2.8537	0.0240	0.7894	0.0315	0.8209	0.2132	0.0301	0.2432		2,578.8389	2,578.8389	0.2082		2,584.0442

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1317	0.0000	0.1317	0.0166	0.0000	0.0166			0.0000			0.0000
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466	0.1317	2.4447	2.5764	0.0166	2.2491	2.2657		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2037	7.1889	1.6322	0.0202	17.1450	0.0229	17.1679	4.2212	0.0220	4.2431		2,206.7538	2,206.7538	0.1944		2,211.6134
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.3359	7.2845	2.7165	0.0236	17.4771	0.0252	17.5023	4.3093	0.0240	4.3333		2,544.2642	2,544.2642	0.2042		2,549.3693

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0593	0.0000	0.0593	7.4600e-003	0.0000	7.4600e-003			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466	0.0593	1.2942	1.3534	7.4600e-003	1.2942	1.3016	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2037	7.1889	1.6322	0.0202	17.1450	0.0229	17.1679	4.2212	0.0220	4.2431		2,206.7538	2,206.7538	0.1944		2,211.6134
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.3359	7.2845	2.7165	0.0236	17.4771	0.0252	17.5023	4.3093	0.0240	4.3333		2,544.2642	2,544.2642	0.2042		2,549.3693

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0884	0.2746	0.7219	2.5900e-003	0.2166	2.3800e-003	0.2190	0.0577	2.2300e-003	0.0600		262.0422	262.0422	0.0102		262.2964

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0884	0.2746	0.7219	2.5900e-003	0.2166	2.3800e-003	0.2190	0.0577	2.2300e-003	0.0600		262.0422	262.0422	0.0102		262.2964

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Unmitigated	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.6512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1100e-003	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489
Total	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.6512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Total	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Morena Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	637.91	1000sqft	14.64	637,908.36	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	318954	0
tblAreaCoating	Area_Nonresidential_Interior	956862	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	200.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	637,910.00	637,908.36
tblLandUse	LandUseSquareFeet	637,910.00	637,908.36
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	791.01	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	5,154.00
tblTripsAndVMT	VendorTripNumber	105.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblTripsAndVMT	WorkerTripNumber	268.00	16.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	147,516,687.50	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.9841	54.6354	32.4689	0.0699	0.9211	2.6848	3.6059	0.2298	2.4711	2.7009	0.0000	7,130.809 9	7,130.809 9	1.6736	0.0000	7,172.649 1
2020	4.6891	50.8687	31.9316	0.0696	17.6088	2.4703	20.0792	4.3259	2.2736	6.5994	0.0000	6,997.217 9	6,997.217 9	1.6694	0.0000	7,038.952 8
2021	1.3448	12.9791	15.2291	0.0247	0.2044	0.6791	0.8835	0.0542	0.6248	0.6790	0.0000	2,395.551 5	2,395.551 5	0.7191	0.0000	2,413.528 6
Maximum	4.9841	54.6354	32.4689	0.0699	17.6088	2.6848	20.0792	4.3259	2.4711	6.5994	0.0000	7,130.809 9	7,130.809 9	1.6736	0.0000	7,172.649 1

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	1.5348	31.6444	34.2409	0.0699	0.8486	1.3263	2.1750	0.2207	1.3249	1.5455	0.0000	7,130.809 9	7,130.809 9	1.6736	0.0000	7,172.649 1
2020	1.5040	31.0710	34.0969	0.0696	17.5364	1.3198	18.8562	4.3167	1.3186	5.6353	0.0000	6,997.217 9	6,997.217 9	1.6694	0.0000	7,038.952 8
2021	0.6502	11.3552	17.8716	0.0247	0.2044	0.6107	0.8151	0.0542	0.6106	0.6648	0.0000	2,395.551 5	2,395.551 5	0.7191	0.0000	2,413.528 6
Maximum	1.5348	31.6444	34.2409	0.0699	17.5364	1.3263	18.8562	4.3167	1.3249	5.6353	0.0000	7,130.809 9	7,130.809 9	1.6736	0.0000	7,172.649 1

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	66.52	37.48	-8.26	0.00	0.77	44.18	11.08	0.40	39.40	21.38	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.6574	6.0000e-004	0.0654	0.0000	0.0000	2.3000e-004	2.3000e-004	0.0000	2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004	0.0000	0.1489

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	13.6538	3.3000e-004	0.0379	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004	0.0000	0.0792

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.00	42.03	0.00	0.00	56.52	56.52	0.00	56.52	56.52	0.00	46.11	46.11	56.76	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	4/2/2019	1/6/2020	5	200	
2	Building Construction	Building Construction	1/7/2020	10/12/2020	5	200	Pipeline installation and backfill.
3	Paving	Paving	10/13/2020	7/19/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	5,154.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1317	0.0000	0.1317	0.0166	0.0000	0.0166			0.0000			0.0000
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465	0.1317	2.6526	2.7844	0.0166	2.4404	2.4570		4,610.9827	4,610.9827	1.4589		4,647.4543

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2300	7.8199	1.7907	0.0201	0.4573	0.0299	0.4872	0.1251	0.0286	0.1537		2,192.7921	2,192.7921	0.2045		2,197.9051
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.3936	7.9387	2.8854	0.0234	0.7894	0.0322	0.8215	0.2132	0.0307	0.2439		2,519.8272	2,519.8272	0.2147		2,525.1948

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0593	0.0000	0.0593	7.4600e-003	0.0000	7.4600e-003			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465	0.0593	1.2942	1.3534	7.4600e-003	1.2942	1.3016	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2300	7.8199	1.7907	0.0201	0.4573	0.0299	0.4872	0.1251	0.0286	0.1537		2,192.7921	2,192.7921	0.2045		2,197.9051
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.3936	7.9387	2.8854	0.0234	0.7894	0.0322	0.8215	0.2132	0.0307	0.2439		2,519.8272	2,519.8272	0.2147		2,525.1948

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1317	0.0000	0.1317	0.0166	0.0000	0.0166			0.0000			0.0000
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466	0.1317	2.4447	2.5764	0.0166	2.2491	2.2657		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2093	7.2581	1.7401	0.0198	17.1450	0.0234	17.1684	4.2212	0.0224	4.2436		2,168.8945	2,168.8945	0.2010		2,173.9205
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.3627	7.3653	2.7414	0.0230	17.4771	0.0257	17.5028	4.3093	0.0245	4.3337		2,485.5979	2,485.5979	0.2103		2,490.8541

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0593	0.0000	0.0593	7.4600e-003	0.0000	7.4600e-003			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466	0.0593	1.2942	1.3534	7.4600e-003	1.2942	1.3016	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2093	7.2581	1.7401	0.0198	17.1450	0.0234	17.1684	4.2212	0.0224	4.2436		2,168.8945	2,168.8945	0.2010		2,173.9205
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.3627	7.3653	2.7414	0.0230	17.4771	0.0257	17.5028	4.3093	0.0245	4.3337		2,485.5979	2,485.5979	0.2103		2,490.8541

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.1017	0.2812	0.6772	2.4500e-003	0.2166	2.4100e-003	0.2190	0.0577	2.2500e-003	0.0600		247.7223	247.7223	0.0101		247.9739

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.1017	0.2812	0.6772	2.4500e-003	0.2166	2.4100e-003	0.2190	0.0577	2.2500e-003	0.0600		247.7223	247.7223	0.0101		247.9739

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Unmitigated	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.6512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.1100e-003	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489
Total	13.6574	6.0000e-004	0.0654	0.0000		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004		0.1396	0.1396	3.7000e-004		0.1489

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.6512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5900e-003	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792
Total	13.6538	3.3000e-004	0.0379	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0752	0.0752	1.6000e-004		0.0792

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Morena Pipeline-Trenchless
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	1.00	150.00
tblConstructionPhase	NumDays	1.00	150.00
tblEnergyUse	LightingElect	2.91	0.00

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tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblProjectCharacteristics	OperationalYear	2018	2022

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tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2324	2.1901	1.4981	2.5500e-003	0.0167	0.1216	0.1383	4.4500e-003	0.1135	0.1180	0.0000	227.5014	227.5014	0.0569	0.0000	228.9244
2020	0.1910	1.7175	1.3363	2.2900e-003	0.0256	0.0973	0.1229	6.8100e-003	0.0908	0.0976	0.0000	201.0499	201.0499	0.0477	0.0000	202.2425
2021	0.0710	0.6361	0.4991	8.8000e-004	9.5800e-003	0.0346	0.0442	2.5500e-003	0.0323	0.0349	0.0000	77.1053	77.1053	0.0179	0.0000	77.5517
Maximum	0.2324	2.1901	1.4981	2.5500e-003	0.0256	0.1216	0.1383	6.8100e-003	0.1135	0.1180	0.0000	227.5014	227.5014	0.0569	0.0000	228.9244

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0635	1.1744	1.5803	2.5500e-003	0.0167	0.0641	0.0808	4.4500e-003	0.0641	0.0685	0.0000	227.5011	227.5011	0.0569	0.0000	228.9241
2020	0.0579	1.0204	1.4065	2.2900e-003	0.0256	0.0580	0.0835	6.8100e-003	0.0579	0.0648	0.0000	201.0497	201.0497	0.0477	0.0000	202.2422
2021	0.0219	0.3880	0.5317	8.8000e-004	9.5800e-003	0.0215	0.0310	2.5500e-003	0.0215	0.0240	0.0000	77.1052	77.1052	0.0179	0.0000	77.5516
Maximum	0.0635	1.1744	1.5803	2.5500e-003	0.0256	0.0641	0.0835	6.8100e-003	0.0641	0.0685	0.0000	227.5011	227.5011	0.0569	0.0000	228.9241

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	71.02	43.16	-5.55	0.00	0.00	43.39	36.02	0.00	39.38	37.21	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-2-2019	7-1-2019	0.2961	0.1596
		Highest	0.2961	0.1596

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0125	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.49	0.00	33.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	57.14

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	4/2/2019	5/6/2019	5	25	
2	Portal Excavation	Site Preparation	5/7/2019	12/2/2019	5	150	
3	Site Restoration	Site Preparation	12/3/2019	6/29/2020	5	150	
4	Tunnel Excavation	Trenching	6/30/2020	3/22/2021	5	190	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2729	0.1525	3.1000e-004		0.0109	0.0109		0.0100	0.0100	0.0000	27.9524	27.9524	8.8400e-003	0.0000	28.1735
Total	0.0223	0.2729	0.1525	3.1000e-004	0.0000	0.0109	0.0109	0.0000	0.0100	0.0100	0.0000	27.9524	27.9524	8.8400e-003	0.0000	28.1735

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3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.5000e-004	4.2400e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535
Total	5.5000e-004	4.5000e-004	4.2400e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.6400e-003	0.1510	0.1742	3.1000e-004		6.4200e-003	6.4200e-003		6.4200e-003	6.4200e-003	0.0000	27.9524	27.9524	8.8400e-003	0.0000	28.1735
Total	7.6400e-003	0.1510	0.1742	3.1000e-004	0.0000	6.4200e-003	6.4200e-003	0.0000	6.4200e-003	6.4200e-003	0.0000	27.9524	27.9524	8.8400e-003	0.0000	28.1735

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3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	4.5000e-004	4.2400e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535
Total	5.5000e-004	4.5000e-004	4.2400e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1526	1.1526	4.0000e-005	0.0000	1.1535

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2002	1.8866	1.2646	2.0400e-003		0.1089	0.1089		0.1019	0.1019	0.0000	181.1521	181.1521	0.0467	0.0000	182.3188
Total	0.2002	1.8866	1.2646	2.0400e-003	0.0000	0.1089	0.1089	0.0000	0.1019	0.1019	0.0000	181.1521	181.1521	0.0467	0.0000	182.3188

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3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6400e-003	5.3900e-003	0.0508	1.5000e-004	0.0150	1.1000e-004	0.0151	3.9800e-003	1.0000e-004	4.0700e-003	0.0000	13.8308	13.8308	4.3000e-004	0.0000	13.8415
Total	6.6400e-003	5.3900e-003	0.0508	1.5000e-004	0.0150	1.1000e-004	0.0151	3.9800e-003	1.0000e-004	4.0700e-003	0.0000	13.8308	13.8308	4.3000e-004	0.0000	13.8415

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0476	0.9992	1.3247	2.0400e-003		0.0563	0.0563		0.0563	0.0563	0.0000	181.1519	181.1519	0.0467	0.0000	182.3186
Total	0.0476	0.9992	1.3247	2.0400e-003	0.0000	0.0563	0.0563	0.0000	0.0563	0.0563	0.0000	181.1519	181.1519	0.0467	0.0000	182.3186

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3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6400e-003	5.3900e-003	0.0508	1.5000e-004	0.0150	1.1000e-004	0.0151	3.9800e-003	1.0000e-004	4.0700e-003	0.0000	13.8308	13.8308	4.3000e-004	0.0000	13.8415
Total	6.6400e-003	5.3900e-003	0.0508	1.5000e-004	0.0150	1.1000e-004	0.0151	3.9800e-003	1.0000e-004	4.0700e-003	0.0000	13.8308	13.8308	4.3000e-004	0.0000	13.8415

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4400e-003	0.0245	0.0242	3.0000e-005		1.6400e-003	1.6400e-003		1.5100e-003	1.5100e-003	0.0000	2.9295	2.9295	9.3000e-004	0.0000	2.9526
Total	2.4400e-003	0.0245	0.0242	3.0000e-005	0.0000	1.6400e-003	1.6400e-003	0.0000	1.5100e-003	1.5100e-003	0.0000	2.9295	2.9295	9.3000e-004	0.0000	2.9526

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3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.9000e-004	1.7800e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4841	0.4841	2.0000e-005	0.0000	0.4845
Total	2.3000e-004	1.9000e-004	1.7800e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4841	0.4841	2.0000e-005	0.0000	0.4845

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	0.0182	0.0246	3.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	2.9295	2.9295	9.3000e-004	0.0000	2.9526
Total	8.0000e-004	0.0182	0.0246	3.0000e-005	0.0000	1.2800e-003	1.2800e-003	0.0000	1.2800e-003	1.2800e-003	0.0000	2.9295	2.9295	9.3000e-004	0.0000	2.9526

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3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.9000e-004	1.7800e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4841	0.4841	2.0000e-005	0.0000	0.4845
Total	2.3000e-004	1.9000e-004	1.7800e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4841	0.4841	2.0000e-005	0.0000	0.4845

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.1358	0.1470	2.0000e-004		8.5900e-003	8.5900e-003		7.9000e-003	7.9000e-003	0.0000	17.5990	17.5990	5.6900e-003	0.0000	17.7413
Total	0.0135	0.1358	0.1470	2.0000e-004	0.0000	8.5900e-003	8.5900e-003	0.0000	7.9000e-003	7.9000e-003	0.0000	17.5990	17.5990	5.6900e-003	0.0000	17.7413

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3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	1.0500e-003	0.0100	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.5000e-004	2.0000e-005	8.8000e-004	0.0000	2.8797	2.8797	8.0000e-005	0.0000	2.8818
Total	1.3400e-003	1.0500e-003	0.0100	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.5000e-004	2.0000e-005	8.8000e-004	0.0000	2.8797	2.8797	8.0000e-005	0.0000	2.8818

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9000e-003	0.1119	0.1511	2.0000e-004		7.8400e-003	7.8400e-003		7.8400e-003	7.8400e-003	0.0000	17.5990	17.5990	5.6900e-003	0.0000	17.7413
Total	4.9000e-003	0.1119	0.1511	2.0000e-004	0.0000	7.8400e-003	7.8400e-003	0.0000	7.8400e-003	7.8400e-003	0.0000	17.5990	17.5990	5.6900e-003	0.0000	17.7413

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3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3400e-003	1.0500e-003	0.0100	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.5000e-004	2.0000e-005	8.8000e-004	0.0000	2.8797	2.8797	8.0000e-005	0.0000	2.8818
Total	1.3400e-003	1.0500e-003	0.0100	3.0000e-005	3.2200e-003	2.0000e-005	3.2400e-003	8.5000e-004	2.0000e-005	8.8000e-004	0.0000	2.8797	2.8797	8.0000e-005	0.0000	2.8818

3.5 Tunnel Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1667	1.5591	1.1084	1.8100e-003		0.0885	0.0885		0.0827	0.0827	0.0000	158.0330	158.0330	0.0411	0.0000	159.0607
Total	0.1667	1.5591	1.1084	1.8100e-003		0.0885	0.0885		0.0827	0.0827	0.0000	158.0330	158.0330	0.0411	0.0000	159.0607

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3.5 Tunnel Excavation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	0.0145	3.8400e-003	3.0000e-005	8.0000e-004	7.0000e-005	8.7000e-004	2.3000e-004	6.0000e-005	3.0000e-004	0.0000	3.2400	3.2400	2.6000e-004	0.0000	3.2464
Worker	8.9600e-003	7.0100e-003	0.0670	2.1000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8600e-003	0.0000	19.2983	19.2983	5.6000e-004	0.0000	19.3123
Total	9.4400e-003	0.0215	0.0709	2.4000e-004	0.0224	2.2000e-004	0.0226	5.9600e-003	2.0000e-004	6.1600e-003	0.0000	22.5383	22.5383	8.2000e-004	0.0000	22.5587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0422	0.8859	1.1745	1.8100e-003		0.0499	0.0499		0.0499	0.0499	0.0000	158.0328	158.0328	0.0411	0.0000	159.0605
Total	0.0422	0.8859	1.1745	1.8100e-003		0.0499	0.0499		0.0499	0.0499	0.0000	158.0328	158.0328	0.0411	0.0000	159.0605

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3.5 Tunnel Excavation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.8000e-004	0.0145	3.8400e-003	3.0000e-005	8.0000e-004	7.0000e-005	8.7000e-004	2.3000e-004	6.0000e-005	3.0000e-004	0.0000	3.2400	3.2400	2.6000e-004	0.0000	3.2464
Worker	8.9600e-003	7.0100e-003	0.0670	2.1000e-004	0.0216	1.5000e-004	0.0217	5.7300e-003	1.4000e-004	5.8600e-003	0.0000	19.2983	19.2983	5.6000e-004	0.0000	19.3123
Total	9.4400e-003	0.0215	0.0709	2.4000e-004	0.0224	2.2000e-004	0.0226	5.9600e-003	2.0000e-004	6.1600e-003	0.0000	22.5383	22.5383	8.2000e-004	0.0000	22.5587

3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0672	0.6278	0.4707	7.7000e-004		0.0345	0.0345		0.0323	0.0323	0.0000	67.7368	67.7368	0.0175	0.0000	68.1751
Total	0.0672	0.6278	0.4707	7.7000e-004		0.0345	0.0345		0.0323	0.0323	0.0000	67.7368	67.7368	0.0175	0.0000	68.1751

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3.5 Tunnel Excavation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.6200e-003	1.4900e-003	1.0000e-005	3.4000e-004	1.0000e-005	3.5000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3758	1.3758	1.1000e-004	0.0000	1.3785
Worker	3.6300e-003	2.7300e-003	0.0269	9.0000e-005	9.2400e-003	6.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.9926	7.9926	2.2000e-004	0.0000	7.9982
Total	3.8000e-003	8.3500e-003	0.0284	1.0000e-004	9.5800e-003	7.0000e-005	9.6500e-003	2.5500e-003	7.0000e-005	2.6200e-003	0.0000	9.3685	9.3685	3.3000e-004	0.0000	9.3767

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0181	0.3797	0.5034	7.7000e-004		0.0214	0.0214		0.0214	0.0214	0.0000	67.7367	67.7367	0.0175	0.0000	68.1750
Total	0.0181	0.3797	0.5034	7.7000e-004		0.0214	0.0214		0.0214	0.0214	0.0000	67.7367	67.7367	0.0175	0.0000	68.1750

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3.5 Tunnel Excavation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7000e-004	5.6200e-003	1.4900e-003	1.0000e-005	3.4000e-004	1.0000e-005	3.5000e-004	1.0000e-004	1.0000e-005	1.1000e-004	0.0000	1.3758	1.3758	1.1000e-004	0.0000	1.3785
Worker	3.6300e-003	2.7300e-003	0.0269	9.0000e-005	9.2400e-003	6.0000e-005	9.3000e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.9926	7.9926	2.2000e-004	0.0000	7.9982
Total	3.8000e-003	8.3500e-003	0.0284	1.0000e-004	9.5800e-003	7.0000e-005	9.6500e-003	2.5500e-003	7.0000e-005	2.6200e-003	0.0000	9.3685	9.3685	3.3000e-004	0.0000	9.3767

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

Morena Pipeline-Trenchless - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Morena Pipeline-Trenchless - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Trenchless - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Trenchless - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Morena Pipeline-Trenchless - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Morena Pipeline-Trenchless
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	1.00	150.00
tblConstructionPhase	NumDays	1.00	150.00
tblEnergyUse	LightingElect	2.91	0.00

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblProjectCharacteristics	OperationalYear	2018	2022

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.7563	25.2202	17.5891	0.0293	0.2044	1.4535	1.6579	0.0542	1.3598	1.4140	0.0000	2,876.9508	2,876.9508	0.7832	0.0000	2,894.2655
2020	2.6461	23.7571	17.8066	0.0311	0.3444	1.3333	1.6777	0.0916	1.2460	1.3376	0.0000	3,011.4255	3,011.4255	0.6954	0.0000	3,028.8094
2021	2.4880	22.3102	17.5809	0.0310	0.3444	1.2144	1.5588	0.0916	1.1339	1.2255	0.0000	2,999.9096	2,999.9096	0.6911	0.0000	3,017.1856
Maximum	2.7563	25.2202	17.8066	0.0311	0.3444	1.4535	1.6777	0.0916	1.3598	1.4140	0.0000	3,011.4255	3,011.4255	0.7832	0.0000	3,028.8094

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.7220	13.3875	18.3901	0.0293	0.2044	0.7515	0.9558	0.0542	0.7514	0.8055	0.0000	2,876.9508	2,876.9508	0.7832	0.0000	2,894.2655
2020	0.7743	13.6338	18.8012	0.0311	0.3444	0.7533	1.0976	0.0916	0.7531	0.8447	0.0000	3,011.4255	3,011.4255	0.6954	0.0000	3,028.8094
2021	0.7656	13.6050	18.7276	0.0310	0.3444	0.7527	1.0970	0.0916	0.7525	0.8441	0.0000	2,999.9096	2,999.9096	0.6911	0.0000	3,017.1856
Maximum	0.7743	13.6338	18.8012	0.0311	0.3444	0.7533	1.0976	0.0916	0.7531	0.8447	0.0000	3,011.4255	3,011.4255	0.7832	0.0000	3,028.8094

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	71.33	43.01	-5.55	0.00	0.00	43.58	35.63	0.00	39.65	37.28	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0739	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000	0.0000	8.0000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0684	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000	0.0000	4.3000e-004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.51	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.05	46.05	0.00	0.00	46.25

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	4/2/2019	5/6/2019	5	25	
2	Portal Excavation	Site Preparation	5/7/2019	12/2/2019	5	150	
3	Site Restoration	Site Preparation	12/3/2019	6/29/2020	5	150	
4	Tunnel Excavation	Trenching	6/30/2020	3/22/2021	5	190	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

3.5 Tunnel Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069
Total	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.5 Tunnel Excavation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1393	0.3113	1.1389	3.9000e-003	0.3444	3.2400e-003	0.3476	0.0916	3.0300e-003	0.0946		391.8539	391.8539	0.0140		392.2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069
Total	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.5 Tunnel Excavation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1393	0.3113	1.1389	3.9000e-003	0.3444	3.2400e-003	0.3476	0.0916	3.0300e-003	0.0946		391.8539	391.8539	0.0140		392.2025

3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471
Total	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.5 Tunnel Excavation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.1249	0.0869	1.0160	3.2700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		326.1664	326.1664	9.0800e-003		326.3934
Total	0.1306	0.2825	1.0654	3.7700e-003	0.3444	2.6000e-003	0.3470	0.0916	2.4000e-003	0.0940		380.0127	380.0127	0.0130		380.3386

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471
Total	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.5 Tunnel Excavation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.1249	0.0869	1.0160	3.2700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		326.1664	326.1664	9.0800e-003		326.3934
Total	0.1306	0.2825	1.0654	3.7700e-003	0.3444	2.6000e-003	0.3470	0.0916	2.4000e-003	0.0940		380.0127	380.0127	0.0130		380.3386

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Unmitigated	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0684					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Total	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pipeline-Trenchless - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Morena Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	25.00
tblConstructionPhase	NumDays	1.00	150.00
tblConstructionPhase	NumDays	1.00	150.00
tblEnergyUse	LightingElect	2.91	0.00

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Tunnel Excavation
tblProjectCharacteristics	OperationalYear	2018	2022

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.7700	25.2282	17.5349	0.0292	0.2044	1.4535	1.6579	0.0542	1.3598	1.4140	0.0000	2,863.7320	2,863.7320	0.7830	0.0000	2,881.0366
2020	2.6675	23.7682	17.7300	0.0309	0.3444	1.3334	1.6777	0.0916	1.2460	1.3376	0.0000	2,989.1029	2,989.1029	0.6950	0.0000	3,006.4783
2021	2.5085	22.3200	17.5067	0.0308	0.3444	1.2144	1.5588	0.0916	1.1340	1.2256	0.0000	2,978.2901	2,978.2901	0.6907	0.0000	2,995.5582
Maximum	2.7700	25.2282	17.7300	0.0309	0.3444	1.4535	1.6777	0.0916	1.3598	1.4140	0.0000	2,989.1029	2,989.1029	0.7830	0.0000	3,006.4783

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.7357	13.3955	18.3359	0.0292	0.2044	0.7515	0.9558	0.0542	0.7514	0.8055	0.0000	2,863.7320	2,863.7320	0.7830	0.0000	2,881.0366
2020	0.7957	13.6449	18.7245	0.0309	0.3444	0.7533	1.0977	0.0916	0.7531	0.8447	0.0000	2,989.1029	2,989.1029	0.6950	0.0000	3,006.4783
2021	0.7860	13.6147	18.6534	0.0308	0.3444	0.7527	1.0970	0.0916	0.7525	0.8441	0.0000	2,978.2901	2,978.2901	0.6907	0.0000	2,995.5582
Maximum	0.7957	13.6449	18.7245	0.0309	0.3444	0.7533	1.0977	0.0916	0.7531	0.8447	0.0000	2,989.1029	2,989.1029	0.7830	0.0000	3,006.4783

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	70.84	42.99	-5.58	0.00	0.00	43.58	35.63	0.00	39.65	37.28	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0739	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000	0.0000	8.0000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0684	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000	0.0000	4.3000e-004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.51	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.05	46.05	0.00	0.00	46.25

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	4/2/2019	5/6/2019	5	25	
2	Portal Excavation	Site Preparation	5/7/2019	12/2/2019	5	150	
3	Site Restoration	Site Preparation	12/3/2019	6/29/2020	5	150	
4	Tunnel Excavation	Trenching	6/30/2020	3/22/2021	5	190	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

3.5 Tunnel Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069
Total	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1607	0.3225	1.0623	3.6700e-003	0.3444	3.2700e-003	0.3476	0.0916	3.0500e-003	0.0946		369.5313	369.5313	0.0136		369.8714

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069
Total	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1607	0.3225	1.0623	3.6700e-003	0.3444	3.2700e-003	0.3476	0.0916	3.0500e-003	0.0946		369.5313	369.5313	0.0136		369.8714

3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471
Total	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471
Total	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Unmitigated	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004
Total	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.0000e-004

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0684					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Total	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pipeline-Trenchless - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Morena Pump Station
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

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Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

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Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

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tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1371	1.2442	0.9792	1.9300e-003	0.0160	0.0598	0.0759	4.3000e-003	0.0566	0.0609	0.0000	169.0148	169.0148	0.0357	0.0000	169.9083
2020	0.1264	0.8404	0.6975	1.3200e-003	9.3800e-003	0.0425	0.0519	2.5100e-003	0.0406	0.0431	0.0000	112.4960	112.4960	0.0217	0.0000	113.0380
Maximum	0.1371	1.2442	0.9792	1.9300e-003	0.0160	0.0598	0.0759	4.3000e-003	0.0566	0.0609	0.0000	169.0148	169.0148	0.0357	0.0000	169.9083

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0437	0.7844	1.0236	1.9300e-003	0.0160	0.0381	0.0541	4.3000e-003	0.0380	0.0424	0.0000	169.0147	169.0147	0.0357	0.0000	169.9082
2020	0.0617	0.6049	0.7500	1.3200e-003	9.3800e-003	0.0346	0.0439	2.5100e-003	0.0345	0.0371	0.0000	112.4958	112.4958	0.0217	0.0000	113.0379
Maximum	0.0617	0.7844	1.0236	1.9300e-003	0.0160	0.0381	0.0541	4.3000e-003	0.0380	0.0424	0.0000	169.0147	169.0147	0.0357	0.0000	169.9082

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	59.98	33.36	-5.78	0.00	0.00	29.06	23.28	0.00	25.34	23.68	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-2-2019	7-1-2019	0.5715	0.2898
2	7-2-2019	10-1-2019	0.2966	0.2184
3	10-2-2019	1-1-2020	0.5148	0.3207
4	1-2-2020	4-1-2020	0.4793	0.3231
5	4-2-2020	7-1-2020	0.4463	0.3115
6	7-2-2020	9-30-2020	0.0363	0.0280
		Highest	0.5715	0.3231

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0265	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0265	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-004	5.8900e-003	6.4100e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954
Total	0.0290	5.8900e-003	6.4100e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954

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3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508
Total	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	4.7500e-003	6.4100e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954
Total	0.0283	4.7500e-003	6.4100e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954

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3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508
Total	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0502	0.4307	0.3193	5.7000e-004		0.0232	0.0232		0.0222	0.0222	0.0000	48.5536	48.5536	9.9100e-003	0.0000	48.8012
Total	0.0502	0.4307	0.3193	5.7000e-004		0.0232	0.0232		0.0222	0.0222	0.0000	48.5536	48.5536	9.9100e-003	0.0000	48.8012

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	7.6600e-003	2.0600e-003	2.0000e-005	4.0000e-004	5.0000e-005	4.6000e-004	1.2000e-004	5.0000e-005	1.7000e-004	0.0000	1.6206	1.6206	1.3000e-004	0.0000	1.6239
Worker	1.9200e-003	1.4800e-003	0.0143	4.0000e-005	3.9100e-003	3.0000e-005	3.9400e-003	1.0400e-003	3.0000e-005	1.0700e-003	0.0000	3.6527	3.6527	1.2000e-004	0.0000	3.6556
Total	2.2100e-003	9.1400e-003	0.0163	6.0000e-005	4.3100e-003	8.0000e-005	4.4000e-003	1.1600e-003	8.0000e-005	1.2400e-003	0.0000	5.2733	5.2733	2.5000e-004	0.0000	5.2795

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.2789	0.3336	5.7000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	48.5535	48.5535	9.9100e-003	0.0000	48.8012
Total	0.0138	0.2789	0.3336	5.7000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	48.5535	48.5535	9.9100e-003	0.0000	48.8012

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	7.6600e-003	2.0600e-003	2.0000e-005	4.0000e-004	5.0000e-005	4.6000e-004	1.2000e-004	5.0000e-005	1.7000e-004	0.0000	1.6206	1.6206	1.3000e-004	0.0000	1.6239
Worker	1.9200e-003	1.4800e-003	0.0143	4.0000e-005	3.9100e-003	3.0000e-005	3.9400e-003	1.0400e-003	3.0000e-005	1.0700e-003	0.0000	3.6527	3.6527	1.2000e-004	0.0000	3.6556
Total	2.2100e-003	9.1400e-003	0.0163	6.0000e-005	4.3100e-003	8.0000e-005	4.4000e-003	1.1600e-003	8.0000e-005	1.2400e-003	0.0000	5.2733	5.2733	2.5000e-004	0.0000	5.2795

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0882	0.7688	0.6075	1.1100e-003		0.0394	0.0394		0.0377	0.0377	0.0000	93.6891	93.6891	0.0189	0.0000	94.1609
Total	0.0882	0.7688	0.6075	1.1100e-003		0.0394	0.0394		0.0377	0.0377	0.0000	93.6891	93.6891	0.0189	0.0000	94.1609

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0136	3.6000e-003	3.0000e-005	7.9000e-004	7.0000e-005	8.6000e-004	2.3000e-004	6.0000e-005	2.9000e-004	0.0000	3.1400	3.1400	2.4000e-004	0.0000	3.1460
Worker	3.5100e-003	2.6000e-003	0.0255	8.0000e-005	7.6300e-003	5.0000e-005	7.6900e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.9008	6.9008	2.1000e-004	0.0000	6.9060
Total	3.9600e-003	0.0162	0.0291	1.1000e-004	8.4200e-003	1.2000e-004	8.5500e-003	2.2600e-003	1.1000e-004	2.3700e-003	0.0000	10.0408	10.0408	4.5000e-004	0.0000	10.0520

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0270	0.5441	0.6508	1.1100e-003		0.0320	0.0320		0.0320	0.0320	0.0000	93.6890	93.6890	0.0189	0.0000	94.1607
Total	0.0270	0.5441	0.6508	1.1100e-003		0.0320	0.0320		0.0320	0.0320	0.0000	93.6890	93.6890	0.0189	0.0000	94.1607

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0136	3.6000e-003	3.0000e-005	7.9000e-004	7.0000e-005	8.6000e-004	2.3000e-004	6.0000e-005	2.9000e-004	0.0000	3.1400	3.1400	2.4000e-004	0.0000	3.1460
Worker	3.5100e-003	2.6000e-003	0.0255	8.0000e-005	7.6300e-003	5.0000e-005	7.6900e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.9008	6.9008	2.1000e-004	0.0000	6.9060
Total	3.9600e-003	0.0162	0.0291	1.1000e-004	8.4200e-003	1.2000e-004	8.5500e-003	2.2600e-003	1.1000e-004	2.3700e-003	0.0000	10.0408	10.0408	4.5000e-004	0.0000	10.0520

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4340	0.2648	4.8000e-004		0.0221	0.0221		0.0209	0.0209	0.0000	42.3268	42.3268	9.9000e-003	0.0000	42.5742
Total	0.0451	0.4340	0.2648	4.8000e-004		0.0221	0.0221		0.0209	0.0209	0.0000	42.3268	42.3268	9.9000e-003	0.0000	42.5742

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3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597
Total	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0104	0.2108	0.2774	4.8000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	42.3267	42.3267	9.9000e-003	0.0000	42.5741
Total	0.0104	0.2108	0.2774	4.8000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	42.3267	42.3267	9.9000e-003	0.0000	42.5741

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3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597
Total	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3059	0.3352	5.8000e-004		0.0141	0.0141		0.0132	0.0132	0.0000	49.5224	49.5224	0.0140	0.0000	49.8731
Total	0.0337	0.3059	0.3352	5.8000e-004		0.0141	0.0141		0.0132	0.0132	0.0000	49.5224	49.5224	0.0140	0.0000	49.8731

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3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7600e-003	0.0613	0.0134	1.6000e-004	3.4200e-003	2.3000e-004	3.6500e-003	9.4000e-004	2.2000e-004	1.1600e-003	0.0000	15.5919	15.5919	1.4100e-003	0.0000	15.6272
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.1800e-003	0.0211	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3892	5.3892	1.7000e-004	0.0000	5.3935
Total	4.6000e-003	0.0635	0.0344	2.2000e-004	9.1900e-003	2.7000e-004	9.4700e-003	2.4700e-003	2.6000e-004	2.7300e-003	0.0000	20.9811	20.9811	1.5800e-003	0.0000	21.0207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.2211	0.3526	5.8000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	49.5223	49.5223	0.0140	0.0000	49.8731
Total	0.0114	0.2211	0.3526	5.8000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	49.5223	49.5223	0.0140	0.0000	49.8731

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3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7600e-003	0.0613	0.0134	1.6000e-004	3.4200e-003	2.3000e-004	3.6500e-003	9.4000e-004	2.2000e-004	1.1600e-003	0.0000	15.5919	15.5919	1.4100e-003	0.0000	15.6272
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.1800e-003	0.0211	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3892	5.3892	1.7000e-004	0.0000	5.3935
Total	4.6000e-003	0.0635	0.0344	2.2000e-004	9.1900e-003	2.7000e-004	9.4700e-003	2.4700e-003	2.6000e-004	2.7300e-003	0.0000	20.9811	20.9811	1.5800e-003	0.0000	21.0207

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7500e-003	0.0492	0.0513	8.0000e-005		2.6300e-003	2.6300e-003		2.4200e-003	2.4200e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.7500e-003	0.0492	0.0513	8.0000e-005		2.6300e-003	2.6300e-003		2.4200e-003	2.4200e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125
Total	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9600e-003	0.0395	0.0605	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.9600e-003	0.0395	0.0605	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125
Total	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Unmitigated	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Morena Pump Station - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

Morena Pump Station - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Morena Pump Station - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pump Station - San Diego County APCD Air District, Summer

Morena Pump Station
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Morena Pump Station - San Diego County APCD Air District, Summer

Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Morena Pump Station - San Diego County APCD Air District, Summer

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Morena Pump Station - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Morena Pump Station - San Diego County APCD Air District, Summer

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

Morena Pump Station - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

Morena Pump Station - San Diego County APCD Air District, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.0607	19.3276	12.2006	0.0227	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014
2020	8.2879	13.1865	10.7210	0.0206	0.1450	0.6638	0.8088	0.0388	0.6354	0.6742	0.0000	1,929.3539	1,929.3539	0.3610	0.0000	1,938.3032
Maximum	8.2879	19.3276	12.2006	0.0227	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5260	9.4366	12.7600	0.0227	0.2091	0.5397	0.6847	0.0561	0.5396	0.5783	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014
2020	8.1052	9.4098	11.4486	0.0206	0.1450	0.5391	0.6841	0.0388	0.5390	0.5777	0.0000	1,929.3539	1,929.3539	0.3610	0.0000	1,938.3032
Maximum	8.1052	9.4366	12.7600	0.0227	0.2091	0.5397	0.6847	0.0561	0.5396	0.5783	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	16.60	42.04	-5.61	0.00	0.00	34.56	28.29	0.00	30.98	29.16	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pump Station - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Morena Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	8.2806	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675
Total	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	8.0978	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675
Total	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428
Total	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466
Total	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761
Total	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761
Total	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0386	1.3350	0.2882	3.5300e-003	0.0777	5.0400e-003	0.0827	0.0213	4.8200e-003	0.0261		384.6545	384.6545	0.0340		385.5055
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1014	1.3788	0.7832	4.9300e-003	0.2091	5.9800e-003	0.2151	0.0561	5.6800e-003	0.0618		523.8865	523.8865	0.0385		524.8486

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0386	1.3350	0.2882	3.5300e-003	0.0777	5.0400e-003	0.0827	0.0213	4.8200e-003	0.0261		384.6545	384.6545	0.0340		385.5055
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1014	1.3788	0.7832	4.9300e-003	0.2091	5.9800e-003	0.2151	0.0561	5.6800e-003	0.0618		523.8865	523.8865	0.0385		524.8486

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pump Station - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pump Station - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Unmitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pump Station - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pump Station - San Diego County APCD Air District, Winter

Morena Pump Station
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Morena Pump Station - San Diego County APCD Air District, Winter

Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Morena Pump Station - San Diego County APCD Air District, Winter

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Morena Pump Station - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Morena Pump Station - San Diego County APCD Air District, Winter

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

Morena Pump Station - San Diego County APCD Air District, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.0679	19.3323	12.1768	0.0226	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363
2020	8.2889	13.1911	10.7013	0.0205	0.1450	0.6639	0.8088	0.0388	0.6355	0.6742	0.0000	1,919.5799	1,919.5799	0.3608	0.0000	1,928.5306
Maximum	8.2889	19.3323	12.1768	0.0226	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5346	9.4422	12.7362	0.0226	0.2091	0.5397	0.6847	0.0561	0.5396	0.5784	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363
2020	8.1062	9.4145	11.4289	0.0205	0.1450	0.5391	0.6841	0.0388	0.5390	0.5777	0.0000	1,919.5799	1,919.5799	0.3608	0.0000	1,928.5306
Maximum	8.1062	9.4422	12.7362	0.0226	0.2091	0.5397	0.6847	0.0561	0.5396	0.5784	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	16.57	42.02	-5.63	0.00	0.00	34.56	28.28	0.00	30.98	29.16	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pump Station - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Morena Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	8.2806	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346
Total	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	8.0978	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346
Total	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428
Total	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466
Total	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761
Total	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761
Total	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.3487	0.3088	3.4700e-003	0.0777	5.1600e-003	0.0828	0.0213	4.9300e-003	0.0262		378.1817	378.1817	0.0353		379.0635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1107	1.3979	0.7767	4.7800e-003	0.2091	6.1000e-003	0.2152	0.0561	5.7900e-003	0.0620		508.8879	508.8879	0.0395		509.8752

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.3487	0.3088	3.4700e-003	0.0777	5.1600e-003	0.0828	0.0213	4.9300e-003	0.0262		378.1817	378.1817	0.0353		379.0635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1107	1.3979	0.7767	4.7800e-003	0.2091	6.1000e-003	0.2152	0.0561	5.7900e-003	0.0620		508.8879	508.8879	0.0395		509.8752

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pump Station - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pump Station - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Unmitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pump Station - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Annual

NCPWF IPS
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Annual

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

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tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

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tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	0.6405	0.4921
2	4-7-2019	7-6-2019	0.5789	0.4506
3	7-7-2019	10-6-2019	0.6442	0.4735
4	10-7-2019	1-6-2020	0.6432	0.4750
5	1-7-2020	4-6-2020	0.5838	0.4524
6	4-7-2020	7-6-2020	0.5667	0.4433
7	7-7-2020	9-30-2020	0.2885	0.2163
		Highest	0.6442	0.4921

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0293	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1066	3.8200e-003	1.0000e-005	0.2045

NCPWF IPS - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0293	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1066	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0118	0.0128	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907
Total	0.0328	0.0118	0.0128	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907

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3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	9.5000e-003	0.0128	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907
Total	0.0315	9.5000e-003	0.0128	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907

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3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1312	1.1310	0.8527	1.4600e-003		0.0644	0.0644		0.0612	0.0612	0.0000	125.0281	125.0281	0.0271	0.0000	125.7062
Total	0.1312	1.1310	0.8527	1.4600e-003		0.0644	0.0644		0.0612	0.0612	0.0000	125.0281	125.0281	0.0271	0.0000	125.7062

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9500e-003	0.0523	0.0141	1.1000e-004	2.7700e-003	3.6000e-004	3.1300e-003	8.0000e-004	3.5000e-004	1.1500e-003	0.0000	11.0788	11.0788	8.9000e-004	0.0000	11.1010
Worker	0.0274	0.0210	0.2034	5.8000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.7000e-004	0.0152	0.0000	52.0205	52.0205	1.6700e-003	0.0000	52.0623
Total	0.0294	0.0734	0.2174	6.9000e-004	0.0585	7.7000e-004	0.0593	0.0156	7.2000e-004	0.0163	0.0000	63.0993	63.0993	2.5600e-003	0.0000	63.1633

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0607	0.8406	0.9002	1.4600e-003		0.0517	0.0517		0.0501	0.0501	0.0000	125.0279	125.0279	0.0271	0.0000	125.7061
Total	0.0607	0.8406	0.9002	1.4600e-003		0.0517	0.0517		0.0501	0.0501	0.0000	125.0279	125.0279	0.0271	0.0000	125.7061

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9500e-003	0.0523	0.0141	1.1000e-004	2.7700e-003	3.6000e-004	3.1300e-003	8.0000e-004	3.5000e-004	1.1500e-003	0.0000	11.0788	11.0788	8.9000e-004	0.0000	11.1010
Worker	0.0274	0.0210	0.2034	5.8000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.7000e-004	0.0152	0.0000	52.0205	52.0205	1.6700e-003	0.0000	52.0623
Total	0.0294	0.0734	0.2174	6.9000e-004	0.0585	7.7000e-004	0.0593	0.0156	7.2000e-004	0.0163	0.0000	63.0993	63.0993	2.5600e-003	0.0000	63.1633

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1029	0.9000	0.7254	1.2700e-003		0.0488	0.0488		0.0464	0.0464	0.0000	107.5175	107.5175	0.0232	0.0000	108.0963
Total	0.1029	0.9000	0.7254	1.2700e-003		0.0488	0.0488		0.0464	0.0464	0.0000	107.5175	107.5175	0.0232	0.0000	108.0963

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0414	0.0110	1.0000e-004	2.4100e-003	2.0000e-004	2.6100e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.5782	9.5782	7.3000e-004	0.0000	9.5965
Worker	0.0223	0.0165	0.1619	4.9000e-004	0.0485	3.5000e-004	0.0489	0.0129	3.2000e-004	0.0132	0.0000	43.8550	43.8550	1.3200e-003	0.0000	43.8879
Total	0.0237	0.0579	0.1729	5.9000e-004	0.0509	5.5000e-004	0.0515	0.0136	5.1000e-004	0.0141	0.0000	53.4331	53.4331	2.0500e-003	0.0000	53.4844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0502	0.7081	0.7812	1.2700e-003		0.0426	0.0426		0.0413	0.0413	0.0000	107.5174	107.5174	0.0232	0.0000	108.0962
Total	0.0502	0.7081	0.7812	1.2700e-003		0.0426	0.0426		0.0413	0.0413	0.0000	107.5174	107.5174	0.0232	0.0000	108.0962

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0414	0.0110	1.0000e-004	2.4100e-003	2.0000e-004	2.6100e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.5782	9.5782	7.3000e-004	0.0000	9.5965
Worker	0.0223	0.0165	0.1619	4.9000e-004	0.0485	3.5000e-004	0.0489	0.0129	3.2000e-004	0.0132	0.0000	43.8550	43.8550	1.3200e-003	0.0000	43.8879
Total	0.0237	0.0579	0.1729	5.9000e-004	0.0509	5.5000e-004	0.0515	0.0136	5.1000e-004	0.0141	0.0000	53.4331	53.4331	2.0500e-003	0.0000	53.4844

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0247	0.2394	0.1598	2.7000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969
Total	0.0247	0.2394	0.1598	2.7000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969

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3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0148	0.1797	0.1637	2.7000e-004		9.7700e-003	9.7700e-003		9.3600e-003	9.3600e-003	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969
Total	0.0148	0.1797	0.1637	2.7000e-004		9.7700e-003	9.7700e-003		9.3600e-003	9.3600e-003	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969

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3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0367	0.0000	0.0367	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0827	0.7483	0.7359	1.2000e-003		0.0413	0.0413		0.0391	0.0391	0.0000	104.6221	104.6221	0.0249	0.0000	105.2451
Total	0.0827	0.7483	0.7359	1.2000e-003	0.0367	0.0413	0.0781	0.0201	0.0391	0.0592	0.0000	104.6221	104.6221	0.0249	0.0000	105.2451

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3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.6500e-003	2.1100e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4557	2.4557	2.2000e-004	0.0000	2.4613
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.4700e-003	0.0142	4.0000e-005	3.8900e-003	3.0000e-005	3.9200e-003	1.0300e-003	3.0000e-005	1.0600e-003	0.0000	3.6302	3.6302	1.2000e-004	0.0000	3.6331
Total	2.1900e-003	0.0111	0.0163	6.0000e-005	4.4300e-003	7.0000e-005	4.5000e-003	1.1800e-003	6.0000e-005	1.2400e-003	0.0000	6.0859	6.0859	3.4000e-004	0.0000	6.0944

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0165	0.0000	0.0165	9.0400e-003	0.0000	9.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0458	0.6077	0.7600	1.2000e-003		0.0352	0.0352		0.0343	0.0343	0.0000	104.6220	104.6220	0.0249	0.0000	105.2450
Total	0.0458	0.6077	0.7600	1.2000e-003	0.0165	0.0352	0.0517	9.0400e-003	0.0343	0.0433	0.0000	104.6220	104.6220	0.0249	0.0000	105.2450

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3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.6500e-003	2.1100e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4557	2.4557	2.2000e-004	0.0000	2.4613
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.4700e-003	0.0142	4.0000e-005	3.8900e-003	3.0000e-005	3.9200e-003	1.0300e-003	3.0000e-005	1.0600e-003	0.0000	3.6302	3.6302	1.2000e-004	0.0000	3.6331
Total	2.1900e-003	0.0111	0.0163	6.0000e-005	4.4300e-003	7.0000e-005	4.5000e-003	1.1800e-003	6.0000e-005	1.2400e-003	0.0000	6.0859	6.0859	3.4000e-004	0.0000	6.0944

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0362	0.3321	0.3185	5.2000e-004		0.0179	0.0179		0.0166	0.0166	0.0000	43.0006	43.0006	0.0122	0.0000	43.3061
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0362	0.3321	0.3185	5.2000e-004		0.0179	0.0179		0.0166	0.0166	0.0000	43.0006	43.0006	0.0122	0.0000	43.3061

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230
Total	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0194	0.2551	0.3316	5.2000e-004		0.0144	0.0144		0.0141	0.0141	0.0000	43.0005	43.0005	0.0122	0.0000	43.3061
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0194	0.2551	0.3316	5.2000e-004		0.0144	0.0144		0.0141	0.0141	0.0000	43.0005	43.0005	0.0122	0.0000	43.3061

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230
Total	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Unmitigated	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Summer

NCPWF IPS
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Summer

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

NCPWF IPS - San Diego County APCD Air District, Summer

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

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tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

NCPWF IPS - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF IPS - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

NCPWF IPS - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	4.6785	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026
Total	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	4.4958	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026
Total	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754
Total	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.7439	0.1921	1.6600e-003	0.0406	5.1800e-003	0.0458	0.0117	4.9500e-003	0.0166		177.6100	177.6100	0.0137		177.9528
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4203	1.0180	3.2862	0.0104	0.8621	0.0110	0.8731	0.2296	0.0104	0.2399		1,047.8096	1,047.8096	0.0415		1,048.8471

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754
Total	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.7439	0.1921	1.6600e-003	0.0406	5.1800e-003	0.0458	0.0117	4.9500e-003	0.0166		177.6100	177.6100	0.0137		177.9528
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4203	1.0180	3.2862	0.0104	0.8621	0.0110	0.8731	0.2296	0.0104	0.2399		1,047.8096	1,047.8096	0.0415		1,048.8471

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173
Total	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.3670	0.2472	2.8346	8.4600e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		842.7471	842.7471	0.0252		843.3762
Total	0.3894	0.9238	3.0070	0.0101	0.8621	9.0700e-003	0.8712	0.2296	8.4800e-003	0.2381		1,019.1711	1,019.1711	0.0382		1,020.1256

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173
Total	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.3670	0.2472	2.8346	8.4600e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		842.7471	842.7471	0.0252		843.3762
Total	0.3894	0.9238	3.0070	0.0101	0.8621	9.0700e-003	0.8712	0.2296	8.4800e-003	0.2381		1,019.1711	1,019.1711	0.0382		1,020.1256

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378
Total	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378
Total	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7574	0.0000	0.7574	0.4143	0.0000	0.4143			0.0000			0.0000
Off-Road	1.7044	15.4281	15.1734	0.0248		0.8524	0.8524		0.8070	0.8070		2,377.8589	2,377.8589	0.5664		2,392.0187
Total	1.7044	15.4281	15.1734	0.0248	0.7574	0.8524	1.6098	0.4143	0.8070	1.2213		2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6400e-003	0.1951	0.0421	5.2000e-004	0.0114	7.4000e-004	0.0121	3.1100e-003	7.0000e-004	3.8100e-003		56.2111	56.2111	4.9700e-003		56.3355
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0449	0.2225	0.3515	1.3900e-003	0.0935	1.3300e-003	0.0948	0.0249	1.2400e-003	0.0261		143.2311	143.2311	7.7500e-003		143.4249

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3408	0.0000	0.3408	0.1865	0.0000	0.1865			0.0000			0.0000
Off-Road	0.9445	12.5296	15.6700	0.0248		0.7254	0.7254		0.7067	0.7067	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187
Total	0.9445	12.5296	15.6700	0.0248	0.3408	0.7254	1.0662	0.1865	0.7067	0.8932	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6400e-003	0.1951	0.0421	5.2000e-004	0.0114	7.4000e-004	0.0121	3.1100e-003	7.0000e-004	3.8100e-003		56.2111	56.2111	4.9700e-003		56.3355
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0449	0.2225	0.3515	1.3900e-003	0.0935	1.3300e-003	0.0948	0.0249	1.2400e-003	0.0261		143.2311	143.2311	7.7500e-003		143.4249

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

NCPWF IPS - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF IPS - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Unmitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF IPS - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Winter

NCPWF IPS

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Winter

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

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tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

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tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

NCPWF IPS - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF IPS - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

NCPWF IPS - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	4.6785	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037
Total	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	4.4958	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037
Total	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754
Total	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0288	0.7445	0.2129	1.6200e-003	0.0406	5.2700e-003	0.0459	0.0117	5.0400e-003	0.0167		173.1002	173.1002	0.0146		173.4648
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4729	1.0523	3.1369	9.8200e-003	0.8621	0.0111	0.8732	0.2296	0.0104	0.2400		990.0139	990.0139	0.0410		991.0376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754
Total	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0288	0.7445	0.2129	1.6200e-003	0.0406	5.2700e-003	0.0459	0.0117	5.0400e-003	0.0167		173.1002	173.1002	0.0146		173.4648
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4729	1.0523	3.1369	9.8200e-003	0.8621	0.0111	0.8732	0.2296	0.0104	0.2400		990.0139	990.0139	0.0410		991.0376

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173
Total	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.4156	0.2776	2.6725	7.9400e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		791.1320	791.1320	0.0238		791.7274
Total	0.4391	0.9536	2.8638	9.5400e-003	0.8621	9.1300e-003	0.8712	0.2296	8.5400e-003	0.2381		963.0093	963.0093	0.0377		963.9505

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173
Total	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.4156	0.2776	2.6725	7.9400e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		791.1320	791.1320	0.0238		791.7274
Total	0.4391	0.9536	2.8638	9.5400e-003	0.8621	9.1300e-003	0.8712	0.2296	8.5400e-003	0.2381		963.0093	963.0093	0.0377		963.9505

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378
Total	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378
Total	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7574	0.0000	0.7574	0.4143	0.0000	0.4143			0.0000			0.0000
Off-Road	1.7044	15.4281	15.1734	0.0248		0.8524	0.8524		0.8070	0.8070		2,377.8589	2,377.8589	0.5664		2,392.0187
Total	1.7044	15.4281	15.1734	0.0248	0.7574	0.8524	1.6098	0.4143	0.8070	1.2213		2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8000e-003	0.1971	0.0451	5.1000e-004	0.0114	7.5000e-004	0.0121	3.1100e-003	7.2000e-004	3.8300e-003		55.2652	55.2652	5.1500e-003		55.3941
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0502	0.2279	0.3375	1.3300e-003	0.0935	1.3400e-003	0.0948	0.0249	1.2600e-003	0.0262		136.9566	136.9566	7.7900e-003		137.1514

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3408	0.0000	0.3408	0.1865	0.0000	0.1865			0.0000			0.0000
Off-Road	0.9445	12.5296	15.6700	0.0248		0.7254	0.7254		0.7067	0.7067	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187
Total	0.9445	12.5296	15.6700	0.0248	0.3408	0.7254	1.0662	0.1865	0.7067	0.8932	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8000e-003	0.1971	0.0451	5.1000e-004	0.0114	7.5000e-004	0.0121	3.1100e-003	7.2000e-004	3.8300e-003		55.2652	55.2652	5.1500e-003		55.3941
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0502	0.2279	0.3375	1.3300e-003	0.0935	1.3400e-003	0.0948	0.0249	1.2600e-003	0.0262		136.9566	136.9566	7.7900e-003		137.1514

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

NCPWF IPS - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF IPS - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Unmitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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NCPWF MR
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	300.00	8.50
tblGrading	AcresOfGrading	211.50	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45

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tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,000.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.4287	5.0312	2.7816	6.5500e-003	0.4061	0.1978	0.6039	0.2091	0.1821	0.3912	0.0000	593.4427	593.4427	0.1655	0.0000	597.5792
2020	0.4438	4.2591	3.2600	7.6600e-003	0.1768	0.1802	0.3570	0.0470	0.1675	0.2145	0.0000	684.7719	684.7719	0.1391	0.0000	688.2491
2021	0.4121	3.8893	3.2737	7.7700e-003	0.1891	0.1580	0.3471	0.0513	0.1470	0.1983	0.0000	694.9486	694.9486	0.1327	0.0000	698.2664
2022	1.6299	1.2192	1.2237	2.8600e-003	0.0748	0.0471	0.1219	0.0202	0.0438	0.0640	0.0000	255.4164	255.4164	0.0497	0.0000	256.6582
Maximum	1.6299	5.0312	3.2737	7.7700e-003	0.4061	0.1978	0.6039	0.2091	0.1821	0.3912	0.0000	694.9486	694.9486	0.1655	0.0000	698.2664

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1524	2.9762	3.2189	6.5500e-003	0.2017	0.1124	0.3141	0.0992	0.1123	0.2115	0.0000	593.4421	593.4421	0.1655	0.0000	597.5786
2020	0.2050	3.2675	3.5866	7.6600e-003	0.1740	0.1455	0.3194	0.0467	0.1453	0.1920	0.0000	684.7715	684.7715	0.1391	0.0000	688.2486
2021	0.2054	3.2318	3.5938	7.7700e-003	0.1891	0.1479	0.3370	0.0513	0.1478	0.1991	0.0000	694.9482	694.9482	0.1327	0.0000	698.2659
2022	1.5713	1.1597	1.3781	2.8600e-003	0.0748	0.0562	0.1309	0.0202	0.0561	0.0763	0.0000	255.4162	255.4162	0.0497	0.0000	256.6580
Maximum	1.5713	3.2675	3.5938	7.7700e-003	0.2017	0.1479	0.3370	0.0992	0.1478	0.2115	0.0000	694.9482	694.9482	0.1655	0.0000	698.2659

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	26.78	26.14	-11.75	0.00	24.47	20.76	22.96	33.64	14.60	21.78	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-21-2019	8-20-2019	3.6785	1.9948
2	8-21-2019	11-20-2019	1.2248	0.7782
3	11-21-2019	2-20-2020	1.1687	0.7753
4	2-21-2020	5-20-2020	1.1583	0.8611
5	5-21-2020	8-20-2020	1.1861	0.8851
6	8-21-2020	11-20-2020	1.1882	0.8871
7	11-21-2020	2-20-2021	1.1307	0.8759
8	2-21-2021	5-20-2021	1.0462	0.8357

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9	5-21-2021	8-20-2021	1.0801	0.8625
10	8-21-2021	11-20-2021	1.0818	0.8642
11	11-21-2021	2-20-2022	1.0245	0.8588
12	2-21-2022	5-20-2022	0.8689	0.7941
13	5-21-2022	8-20-2022	0.7211	0.7339
14	8-21-2022	9-30-2022	0.3214	0.3270
		Highest	3.6785	1.9948

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4814	160.4814	7.9400e-003	0.0000	160.6800
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	4.3542	0.0000	4.3542	0.2573	0.0000	10.7872
Water						0.0000	0.0000		0.0000	0.0000	0.2442	3.2749	3.5191	0.0252	6.2000e-004	4.3339
Total	1.4840	0.3442	0.5732	1.9400e-003	0.1571	7.4800e-003	0.1646	0.0421	7.3900e-003	0.0495	4.5983	182.8020	187.4003	0.2932	6.2000e-004	194.9139

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4814	160.4814	7.9400e-003	0.0000	160.6800
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	4.3542	0.0000	4.3542	0.2573	0.0000	10.7872
Water						0.0000	0.0000		0.0000	0.0000	0.2442	3.2749	3.5191	0.0252	6.2000e-004	4.3339
Total	1.4840	0.3442	0.5732	1.9400e-003	0.1571	7.4800e-003	0.1646	0.0421	7.3900e-003	0.0495	4.5983	182.8020	187.4003	0.2932	6.2000e-004	194.9139

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	8/12/2019	5	60	
2	Finish Grading	Grading	8/13/2019	2/25/2020	5	141	
3	Building Construction	Building Construction	2/26/2020	4/22/2022	5	563	
4	Architectural Coating	Architectural Coating	5/7/2022	11/21/2022	5	141	
5	Paving	Paving	4/23/2022	5/6/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3665	0.0000	0.3665	0.1992	0.0000	0.1992	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2706	3.1204	1.7033	3.4900e-003		0.1304	0.1304		0.1200	0.1200	0.0000	313.2038	313.2038	0.0987	0.0000	315.6712
Total	0.2706	3.1204	1.7033	3.4900e-003	0.3665	0.1304	0.4969	0.1992	0.1200	0.3192	0.0000	313.2038	313.2038	0.0987	0.0000	315.6712

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3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2600e-003	3.2700e-003	0.0316	9.0000e-005	8.6600e-003	6.0000e-005	8.7200e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.0838	8.0838	2.6000e-004	0.0000	8.0903
Total	9.2000e-003	0.1757	0.0692	5.3000e-004	0.0183	7.0000e-004	0.0190	4.9400e-003	6.8000e-004	5.6200e-003	0.0000	51.9360	51.9360	4.2300e-003	0.0000	52.0417

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1649	0.0000	0.1649	0.0896	0.0000	0.0896	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0851	1.6610	1.9204	3.4900e-003		0.0671	0.0671		0.0671	0.0671	0.0000	313.2034	313.2034	0.0987	0.0000	315.6708
Total	0.0851	1.6610	1.9204	3.4900e-003	0.1649	0.0671	0.2320	0.0896	0.0671	0.1568	0.0000	313.2034	313.2034	0.0987	0.0000	315.6708

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3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2600e-003	3.2700e-003	0.0316	9.0000e-005	8.6600e-003	6.0000e-005	8.7200e-003	2.3000e-003	6.0000e-005	2.3600e-003	0.0000	8.0838	8.0838	2.6000e-004	0.0000	8.0903
Total	9.2000e-003	0.1757	0.0692	5.3000e-004	0.0183	7.0000e-004	0.0190	4.9400e-003	6.8000e-004	5.6200e-003	0.0000	51.9360	51.9360	4.2300e-003	0.0000	52.0417

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1400e-003	0.0000	5.1400e-003	5.8000e-004	0.0000	5.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1418	1.6090	0.9556	2.1300e-003		0.0662	0.0662		0.0610	0.0610	0.0000	190.0873	190.0873	0.0595	0.0000	191.5741
Total	0.1418	1.6090	0.9556	2.1300e-003	5.1400e-003	0.0662	0.0713	5.8000e-004	0.0610	0.0615	0.0000	190.0873	190.0873	0.0595	0.0000	191.5741

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3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5400e-003	0.1235	0.0269	3.2000e-004	8.9500e-003	4.6000e-004	9.4100e-003	2.4000e-003	4.4000e-004	2.8400e-003	0.0000	31.4119	31.4119	2.8400e-003	0.0000	31.4830
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5800e-003	2.7500e-003	0.0266	8.0000e-005	7.2900e-003	5.0000e-005	7.3400e-003	1.9400e-003	5.0000e-005	1.9900e-003	0.0000	6.8038	6.8038	2.2000e-004	0.0000	6.8093
Total	7.1200e-003	0.1262	0.0535	4.0000e-004	0.0162	5.1000e-004	0.0168	4.3400e-003	4.9000e-004	4.8300e-003	0.0000	38.2157	38.2157	3.0600e-003	0.0000	38.2923

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3100e-003	0.0000	2.3100e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	1.0133	1.1758	2.1300e-003		0.0441	0.0441		0.0441	0.0441	0.0000	190.0871	190.0871	0.0595	0.0000	191.5738
Total	0.0510	1.0133	1.1758	2.1300e-003	2.3100e-003	0.0441	0.0464	2.6000e-004	0.0441	0.0443	0.0000	190.0871	190.0871	0.0595	0.0000	191.5738

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3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5400e-003	0.1235	0.0269	3.2000e-004	8.9500e-003	4.6000e-004	9.4100e-003	2.4000e-003	4.4000e-004	2.8400e-003	0.0000	31.4119	31.4119	2.8400e-003	0.0000	31.4830
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5800e-003	2.7500e-003	0.0266	8.0000e-005	7.2900e-003	5.0000e-005	7.3400e-003	1.9400e-003	5.0000e-005	1.9900e-003	0.0000	6.8038	6.8038	2.2000e-004	0.0000	6.8093
Total	7.1200e-003	0.1262	0.0535	4.0000e-004	0.0162	5.1000e-004	0.0168	4.3400e-003	4.9000e-004	4.8300e-003	0.0000	38.2157	38.2157	3.0600e-003	0.0000	38.2923

3.3 Finish Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1400e-003	0.0000	5.1400e-003	5.8000e-004	0.0000	5.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0526	0.5823	0.3613	8.4000e-004		0.0235	0.0235		0.0217	0.0217	0.0000	73.6426	73.6426	0.0235	0.0000	74.2311
Total	0.0526	0.5823	0.3613	8.4000e-004	5.1400e-003	0.0235	0.0287	5.8000e-004	0.0217	0.0223	0.0000	73.6426	73.6426	0.0235	0.0000	74.2311

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3.3 Finish Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2800e-003	0.0454	0.0104	1.2000e-004	7.9100e-003	1.4000e-004	8.0600e-003	2.0200e-003	1.4000e-004	2.1600e-003	0.0000	12.3072	12.3072	1.1100e-003	0.0000	12.3349
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.8000e-004	9.6300e-003	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.6096	2.6096	8.0000e-005	0.0000	2.6115
Total	2.6100e-003	0.0464	0.0200	1.5000e-004	0.0108	1.6000e-004	0.0110	2.7900e-003	1.6000e-004	2.9500e-003	0.0000	14.9167	14.9167	1.1900e-003	0.0000	14.9464

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3100e-003	0.0000	2.3100e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0202	0.4013	0.4657	8.4000e-004		0.0175	0.0175		0.0175	0.0175	0.0000	73.6425	73.6425	0.0235	0.0000	74.2310
Total	0.0202	0.4013	0.4657	8.4000e-004	2.3100e-003	0.0175	0.0198	2.6000e-004	0.0175	0.0177	0.0000	73.6425	73.6425	0.0235	0.0000	74.2310

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3.3 Finish Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2800e-003	0.0454	0.0104	1.2000e-004	7.9100e-003	1.4000e-004	8.0600e-003	2.0200e-003	1.4000e-004	2.1600e-003	0.0000	12.3072	12.3072	1.1100e-003	0.0000	12.3349
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	9.8000e-004	9.6300e-003	3.0000e-005	2.8900e-003	2.0000e-005	2.9100e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.6096	2.6096	8.0000e-005	0.0000	2.6115
Total	2.6100e-003	0.0464	0.0200	1.5000e-004	0.0108	1.6000e-004	0.0110	2.7900e-003	1.6000e-004	2.9500e-003	0.0000	14.9167	14.9167	1.1900e-003	0.0000	14.9464

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3101	2.9060	2.2933	3.8300e-003		0.1523	0.1523		0.1416	0.1416	0.0000	328.6269	328.6269	0.0990	0.0000	331.1006
Total	0.3101	2.9060	2.2933	3.8300e-003		0.1523	0.1523		0.1416	0.1416	0.0000	328.6269	328.6269	0.0990	0.0000	331.1006

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0228	0.6832	0.1815	1.6200e-003	0.0398	3.3300e-003	0.0431	0.0115	3.1900e-003	0.0147	0.0000	158.1585	158.1585	0.0121	0.0000	158.4616
Worker	0.0556	0.0412	0.4040	1.2100e-003	0.1211	8.7000e-004	0.1219	0.0322	8.0000e-004	0.0330	0.0000	109.4272	109.4272	3.2900e-003	0.0000	109.5093
Total	0.0785	0.7244	0.5855	2.8300e-003	0.1608	4.2000e-003	0.1651	0.0437	3.9900e-003	0.0476	0.0000	267.5858	267.5858	0.0154	0.0000	267.9710

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1037	2.0954	2.5154	3.8300e-003		0.1237	0.1237		0.1237	0.1237	0.0000	328.6265	328.6265	0.0990	0.0000	331.1002
Total	0.1037	2.0954	2.5154	3.8300e-003		0.1237	0.1237		0.1237	0.1237	0.0000	328.6265	328.6265	0.0990	0.0000	331.1002

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0228	0.6832	0.1815	1.6200e-003	0.0398	3.3300e-003	0.0431	0.0115	3.1900e-003	0.0147	0.0000	158.1585	158.1585	0.0121	0.0000	158.4616
Worker	0.0556	0.0412	0.4040	1.2100e-003	0.1211	8.7000e-004	0.1219	0.0322	8.0000e-004	0.0330	0.0000	109.4272	109.4272	3.2900e-003	0.0000	109.5093
Total	0.0785	0.7244	0.5855	2.8300e-003	0.1608	4.2000e-003	0.1651	0.0437	3.9900e-003	0.0476	0.0000	267.5858	267.5858	0.0154	0.0000	267.9710

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3286	3.1210	2.6372	4.5100e-003		0.1554	0.1554		0.1446	0.1446	0.0000	386.3831	386.3831	0.1155	0.0000	389.2699
Total	0.3286	3.1210	2.6372	4.5100e-003		0.1554	0.1554		0.1446	0.1446	0.0000	386.3831	386.3831	0.1155	0.0000	389.2699

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.7242	0.1931	1.8900e-003	0.0468	1.5300e-003	0.0483	0.0135	1.4700e-003	0.0150	0.0000	184.2368	184.2368	0.0137	0.0000	184.5786
Worker	0.0617	0.0440	0.4434	1.3800e-003	0.1423	1.0100e-003	0.1433	0.0378	9.3000e-004	0.0388	0.0000	124.3288	124.3288	3.5600e-003	0.0000	124.4178
Total	0.0835	0.7682	0.6365	3.2700e-003	0.1891	2.5400e-003	0.1916	0.0513	2.4000e-003	0.0537	0.0000	308.5656	308.5656	0.0172	0.0000	308.9965

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1219	2.4636	2.9573	4.5100e-003		0.1454	0.1454		0.1454	0.1454	0.0000	386.3826	386.3826	0.1155	0.0000	389.2694
Total	0.1219	2.4636	2.9573	4.5100e-003		0.1454	0.1454		0.1454	0.1454	0.0000	386.3826	386.3826	0.1155	0.0000	389.2694

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0218	0.7242	0.1931	1.8900e-003	0.0468	1.5300e-003	0.0483	0.0135	1.4700e-003	0.0150	0.0000	184.2368	184.2368	0.0137	0.0000	184.5786
Worker	0.0617	0.0440	0.4434	1.3800e-003	0.1423	1.0100e-003	0.1433	0.0378	9.3000e-004	0.0388	0.0000	124.3288	124.3288	3.5600e-003	0.0000	124.4178
Total	0.0835	0.7682	0.6365	3.2700e-003	0.1891	2.5400e-003	0.1916	0.0513	2.4000e-003	0.0537	0.0000	308.5656	308.5656	0.0172	0.0000	308.9965

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0904	0.8531	0.7947	1.3800e-003		0.0406	0.0406		0.0378	0.0378	0.0000	118.4639	118.4639	0.0353	0.0000	119.3451
Total	0.0904	0.8531	0.7947	1.3800e-003		0.0406	0.0406		0.0378	0.0378	0.0000	118.4639	118.4639	0.0353	0.0000	119.3451

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3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2100e-003	0.2096	0.0561	5.7000e-004	0.0143	4.0000e-004	0.0147	4.1400e-003	3.9000e-004	4.5300e-003	0.0000	55.9363	55.9363	4.0600e-003	0.0000	56.0378
Worker	0.0179	0.0123	0.1262	4.1000e-004	0.0436	3.0000e-004	0.0439	0.0116	2.8000e-004	0.0119	0.0000	36.7115	36.7115	1.0000e-003	0.0000	36.7365
Total	0.0241	0.2219	0.1822	9.8000e-004	0.0580	7.0000e-004	0.0587	0.0157	6.7000e-004	0.0164	0.0000	92.6477	92.6477	5.0600e-003	0.0000	92.7742

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0374	0.7551	0.9065	1.3800e-003		0.0446	0.0446		0.0446	0.0446	0.0000	118.4638	118.4638	0.0353	0.0000	119.3449
Total	0.0374	0.7551	0.9065	1.3800e-003		0.0446	0.0446		0.0446	0.0446	0.0000	118.4638	118.4638	0.0353	0.0000	119.3449

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2100e-003	0.2096	0.0561	5.7000e-004	0.0143	4.0000e-004	0.0147	4.1400e-003	3.9000e-004	4.5300e-003	0.0000	55.9363	55.9363	4.0600e-003	0.0000	56.0378
Worker	0.0179	0.0123	0.1262	4.1000e-004	0.0436	3.0000e-004	0.0439	0.0116	2.8000e-004	0.0119	0.0000	36.7115	36.7115	1.0000e-003	0.0000	36.7365
Total	0.0241	0.2219	0.1822	9.8000e-004	0.0580	7.0000e-004	0.0587	0.0157	6.7000e-004	0.0164	0.0000	92.6477	92.6477	5.0600e-003	0.0000	92.7742

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5400e-003	0.0395	0.0771	1.2000e-004		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	10.4006	10.4006	3.3600e-003	0.0000	10.4847
Total	1.4972	0.0395	0.0771	1.2000e-004		7.3000e-004	7.3000e-004		6.7000e-004	6.7000e-004	0.0000	10.4006	10.4006	3.3600e-003	0.0000	10.4847

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3.5 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4900e-003	4.4600e-003	0.0458	1.5000e-004	0.0158	1.1000e-004	0.0159	4.2100e-003	1.0000e-004	4.3100e-003	0.0000	13.3214	13.3214	3.6000e-004	0.0000	13.3305
Total	6.4900e-003	4.4600e-003	0.0458	1.5000e-004	0.0158	1.1000e-004	0.0159	4.2100e-003	1.0000e-004	4.3100e-003	0.0000	13.3214	13.3214	3.6000e-004	0.0000	13.3305

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9100e-003	0.0665	0.0899	1.2000e-004		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.0000	10.4006	10.4006	3.3600e-003	0.0000	10.4847
Total	1.4976	0.0665	0.0899	1.2000e-004		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.0000	10.4006	10.4006	3.3600e-003	0.0000	10.4847

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3.5 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4900e-003	4.4600e-003	0.0458	1.5000e-004	0.0158	1.1000e-004	0.0159	4.2100e-003	1.0000e-004	4.3100e-003	0.0000	13.3214	13.3214	3.6000e-004	0.0000	13.3305
Total	6.4900e-003	4.4600e-003	0.0458	1.5000e-004	0.0158	1.1000e-004	0.0159	4.2100e-003	1.0000e-004	4.3100e-003	0.0000	13.3214	13.3214	3.6000e-004	0.0000	13.3305

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.0999	0.1210	2.3000e-004		4.9500e-003	4.9500e-003		4.6200e-003	4.6200e-003	0.0000	19.7729	19.7729	5.6200e-003	0.0000	19.9133
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0113	0.0999	0.1210	2.3000e-004		4.9500e-003	4.9500e-003		4.6200e-003	4.6200e-003	0.0000	19.7729	19.7729	5.6200e-003	0.0000	19.9133

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3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.7000e-004	2.7800e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8098	0.8098	2.0000e-005	0.0000	0.8104
Total	3.9000e-004	2.7000e-004	2.7800e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8098	0.8098	2.0000e-005	0.0000	0.8104

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3800e-003	0.1114	0.1511	2.3000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	19.7729	19.7729	5.6200e-003	0.0000	19.9133
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.3800e-003	0.1114	0.1511	2.3000e-004		6.1000e-003	6.1000e-003		6.1000e-003	6.1000e-003	0.0000	19.7729	19.7729	5.6200e-003	0.0000	19.9133

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3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.7000e-004	2.7800e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8098	0.8098	2.0000e-005	0.0000	0.8104
Total	3.9000e-004	2.7000e-004	2.7800e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8098	0.8098	2.0000e-005	0.0000	0.8104

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4814	160.4814	7.9400e-003	0.0000	160.6800
Unmitigated	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4814	160.4814	7.9400e-003	0.0000	160.6800

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Unmitigated	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Total	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Total	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.5191	0.0252	6.2000e-004	4.3339
Unmitigated	3.5191	0.0252	6.2000e-004	4.3339

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.7696 / 0	3.5191	0.0252	6.2000e-004	4.3339
Total		3.5191	0.0252	6.2000e-004	4.3339

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.7696 / 0	3.5191	0.0252	6.2000e-004	4.3339
Total		3.5191	0.0252	6.2000e-004	4.3339

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3542	0.2573	0.0000	10.7872
Unmitigated	4.3542	0.2573	0.0000	10.7872

NCPWF MR - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	21.45	4.3542	0.2573	0.0000	10.7872
Total		4.3542	0.2573	0.0000	10.7872

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	21.45	4.3542	0.2573	0.0000	10.7872
Total		4.3542	0.2573	0.0000	10.7872

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750-9999 HP)	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Total	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066

11.0 Vegetation

NCPWF MR - San Diego County APCD Air District, Summer

NCPWF MR

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

NCPWF MR - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	300.00	8.50
tblGrading	AcresOfGrading	211.50	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45

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tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,000.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

NCPWF MR - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	9.3242	109.7428	59.1059	0.1345	12.8389	4.3696	17.2084	6.8081	4.0223	10.8304	0.0000	13,444.30 20	13,444.30 20	3.7801	0.0000	13,538.80 32
2020	3.4943	32.6057	26.0662	0.0608	1.4828	1.4095	2.8923	0.4016	1.3118	1.7133	0.0000	5,997.458 4	5,997.458 4	1.3623	0.0000	6,025.807 6
2021	3.1520	29.7205	25.2170	0.0603	1.4828	1.2104	2.6932	0.4016	1.1258	1.5274	0.0000	5,944.652 4	5,944.652 4	1.1194	0.0000	5,972.637 5
2022	21.3282	26.8030	24.7923	0.0597	1.4828	1.0325	2.5152	0.4016	0.9604	1.3620	0.0000	5,890.1187	5,890.1187	1.2433	0.0000	5,917.849 6
Maximum	21.3282	109.7428	59.1059	0.1345	12.8389	4.3696	17.2084	6.8081	4.0223	10.8304	0.0000	13,444.30 20	13,444.30 20	3.7801	0.0000	13,538.80 32

NCPWF MR - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4938	61.5153	42.3261	0.0960	2.9120	1.9572	4.8692	0.7783	1.9555	2.7338		10,059.5348	10,059.5348	1.1023	0.0000	10,087.0916

NCPWF MR - San Diego County APCD Air District, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4938	61.5153	42.3261	0.0960	2.9120	1.9572	4.8692	0.7783	1.9555	2.7338		10,059.5348	10,059.5348	1.1023	0.0000	10,087.0916

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

NCPWF MR - San Diego County APCD Air District, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	8/12/2019	5	60	
2	Finish Grading	Grading	8/13/2019	2/25/2020	5	141	
3	Building Construction	Building Construction	2/26/2020	4/22/2022	5	563	
4	Architectural Coating	Architectural Coating	5/7/2022	11/21/2022	5	141	
5	Paving	Paving	4/23/2022	5/6/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF MR - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF MR - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2155	0.0000	12.2155	6.6399	0.0000	6.6399			0.0000			0.0000
Off-Road	9.0201	104.0122	56.7763	0.1165		4.3462	4.3462		4.0001	4.0001		11,508.268	11,508.268	3.6264		11,598.927
Total	9.0201	104.0122	56.7763	0.1165	12.2155	4.3462	16.5617	6.6399	4.0001	10.6399		11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF MR - San Diego County APCD Air District, Summer

3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1628	5.6320	1.2157	0.0149	0.3276	0.0213	0.3489	0.0898	0.0203	0.1101		1,622.7613	1,622.7613	0.1436		1,626.3515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1414	0.0987	1.1139	3.1500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		313.2719	313.2719	0.0100		313.5220
Total	0.3041	5.7306	2.3296	0.0180	0.6234	0.0234	0.6467	0.1682	0.0223	0.1905		1,936.0332	1,936.0332	0.1536		1,939.8735

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4970	0.0000	5.4970	2.9879	0.0000	2.9879			0.0000			0.0000
Off-Road	2.8364	55.3681	64.0120	0.1165		2.2371	2.2371		2.2371	2.2371	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297
Total	2.8364	55.3681	64.0120	0.1165	5.4970	2.2371	7.7341	2.9879	2.2371	5.2250	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF MR - San Diego County APCD Air District, Summer

3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1628	5.6320	1.2157	0.0149	0.3276	0.0213	0.3489	0.0898	0.0203	0.1101		1,622.7613	1,622.7613	0.1436		1,626.3515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1414	0.0987	1.1139	3.1500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		313.2719	313.2719	0.0100		313.5220
Total	0.3041	5.7306	2.3296	0.0180	0.6234	0.0234	0.6467	0.1682	0.0223	0.1905		1,936.0332	1,936.0332	0.1536		1,939.8735

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0729	0.0000	0.0729	8.2600e-003	0.0000	8.2600e-003			0.0000			0.0000
Off-Road	2.8077	31.8604	18.9226	0.0422		1.3102	1.3102		1.2070	1.2070		4,149.2157	4,149.2157	1.2981		4,181.6684
Total	2.8077	31.8604	18.9226	0.0422	0.0729	1.3102	1.3831	8.2600e-003	1.2070	1.2152		4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF MR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0693	2.3966	0.5173	6.3300e-003	0.1812	9.0400e-003	0.1902	0.0485	8.6500e-003	0.0571		690.5367	690.5367	0.0611		692.0645
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0493	0.5569	1.5700e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		156.6359	156.6359	5.0000e-003		156.7610
Total	0.1399	2.4459	1.0743	7.9000e-003	0.3291	0.0101	0.3392	0.0877	9.6200e-003	0.0973		847.1727	847.1727	0.0661		848.8255

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0328	0.0000	0.0328	3.7200e-003	0.0000	3.7200e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684
Total	1.0103	20.0646	23.2829	0.0422	0.0328	0.8726	0.9054	3.7200e-003	0.8726	0.8763	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF MR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0693	2.3966	0.5173	6.3300e-003	0.1812	9.0400e-003	0.1902	0.0485	8.6500e-003	0.0571		690.5367	690.5367	0.0611		692.0645
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0493	0.5569	1.5700e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		156.6359	156.6359	5.0000e-003		156.7610
Total	0.1399	2.4459	1.0743	7.9000e-003	0.3291	0.0101	0.3392	0.0877	9.6200e-003	0.0973		847.1727	847.1727	0.0661		848.8255

3.3 Finish Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0729	0.0000	0.0729	8.2600e-003	0.0000	8.2600e-003			0.0000			0.0000
Off-Road	2.6311	29.1133	18.0635	0.0422		1.1767	1.1767		1.0842	1.0842		4,058.8516	4,058.8516	1.2976		4,091.2909
Total	2.6311	29.1133	18.0635	0.0422	0.0729	1.1767	1.2496	8.2600e-003	1.0842	1.0924		4,058.8516	4,058.8516	1.2976		4,091.2909

NCPWF MR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0631	2.2258	0.5054	6.2500e-003	0.4058	7.1000e-003	0.4129	0.1036	6.7900e-003	0.1104		683.2394	683.2394	0.0602		684.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.1291	2.2703	1.0156	7.7700e-003	0.5536	8.1400e-003	0.5618	0.1428	7.7500e-003	0.1506		834.9338	834.9338	0.0647		836.5517

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0328	0.0000	0.0328	3.7200e-003	0.0000	3.7200e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,058.8516	4,058.8516	1.2976		4,091.2909
Total	1.0103	20.0646	23.2829	0.0422	0.0328	0.8726	0.9054	3.7200e-003	0.8726	0.8763	0.0000	4,058.8516	4,058.8516	1.2976		4,091.2909

NCPWF MR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0631	2.2258	0.5054	6.2500e-003	0.4058	7.1000e-003	0.4129	0.1036	6.7900e-003	0.1104		683.2394	683.2394	0.0602		684.7440
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.1291	2.2703	1.0156	7.7700e-003	0.5536	8.1400e-003	0.5618	0.1428	7.7500e-003	0.1506		834.9338	834.9338	0.0647		836.5517

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713
Total	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2018	6.0889	1.5512	0.0148	0.3656	0.0298	0.3954	0.1052	0.0285	0.1337		1,587.8164	1,587.8164	0.1171		1,590.7448
Worker	0.4991	0.3363	3.8550	0.0115	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,146.1360	1,146.1360	0.0342		1,146.9916
Total	0.7009	6.4252	5.4063	0.0263	1.4828	0.0376	1.5204	0.4016	0.0357	0.4373		2,733.9524	2,733.9524	0.1514		2,737.7363

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2018	6.0889	1.5512	0.0148	0.3656	0.0298	0.3954	0.1052	0.0285	0.1337		1,587.8164	1,587.8164	0.1171		1,590.7448
Worker	0.4991	0.3363	3.8550	0.0115	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,146.1360	1,146.1360	0.0342		1,146.9916
Total	0.7009	6.4252	5.4063	0.0263	1.4828	0.0376	1.5204	0.4016	0.0357	0.4373		2,733.9524	2,733.9524	0.1514		2,737.7363

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754		3,288.0967
Total	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754		3,288.0967

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1633	5.4988	1.4013	0.0146	0.3656	0.0116	0.3771	0.1052	0.0110	0.1163		1,573.3005	1,573.3005	0.1124		1,576.1109
Worker	0.4704	0.3056	3.6072	0.0111	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,107.6396	1,107.6396	0.0316		1,108.4299
Total	0.6337	5.8044	5.0085	0.0257	1.4828	0.0193	1.5020	0.4016	0.0182	0.4197		2,680.9401	2,680.9401	0.1440		2,684.5408

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.7123	3,263.7123	0.9754		3,288.0967
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.7123	3,263.7123	0.9754		3,288.0967

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1633	5.4988	1.4013	0.0146	0.3656	0.0116	0.3771	0.1052	0.0110	0.1163		1,573.3005	1,573.3005	0.1124		1,576.1109
Worker	0.4704	0.3056	3.6072	0.0111	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,107.6396	1,107.6396	0.0316		1,108.4299
Total	0.6337	5.8044	5.0085	0.0257	1.4828	0.0193	1.5020	0.4016	0.0182	0.4197		2,680.9401	2,680.9401	0.1440		2,684.5408

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2608	21.3278	19.8684	0.0345		1.0150	1.0150		0.9440	0.9440		3,264.6031	3,264.6031	0.9713		3,288.8852
Total	2.2608	21.3278	19.8684	0.0345		1.0150	1.0150		0.9440	0.9440		3,264.6031	3,264.6031	0.9713		3,288.8852

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1519	5.1966	1.3272	0.0145	0.3656	9.9400e-003	0.3755	0.1052	9.5000e-003	0.1147		1,558.5144	1,558.5144	0.1090		1,561.2388
Worker	0.4447	0.2787	3.3543	0.0107	1.1172	7.5500e-003	1.1248	0.2963	6.9500e-003	0.3033		1,067.0013	1,067.0013	0.0290		1,067.7257
Total	0.5966	5.4753	4.6815	0.0252	1.4828	0.0175	1.5003	0.4016	0.0165	0.4180		2,625.5156	2,625.5156	0.1380		2,628.9645

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,264.6030	3,264.6030	0.9713		3,288.8852
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,264.6030	3,264.6030	0.9713		3,288.8852

NCPWF MR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1519	5.1966	1.3272	0.0145	0.3656	9.9400e-003	0.3755	0.1052	9.5000e-003	0.1147		1,558.5144	1,558.5144	0.1090		1,561.2388
Worker	0.4447	0.2787	3.3543	0.0107	1.1172	7.5500e-003	1.1248	0.2963	6.9500e-003	0.3033		1,067.0013	1,067.0013	0.0290		1,067.7257
Total	0.5966	5.4753	4.6815	0.0252	1.4828	0.0175	1.5003	0.4016	0.0165	0.4180		2,625.5156	2,625.5156	0.1380		2,628.9645

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0361	0.5603	1.0940	1.6800e-003		0.0104	0.0104		9.5700e-003	9.5700e-003		162.6199	162.6199	0.0526		163.9347
Total	21.2367	0.5603	1.0940	1.6800e-003		0.0104	0.0104		9.5700e-003	9.5700e-003		162.6199	162.6199	0.0526		163.9347

NCPWF MR - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0574	0.6906	2.2000e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		219.6767	219.6767	5.9700e-003		219.8259
Total	0.0916	0.0574	0.6906	2.2000e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		219.6767	219.6767	5.9700e-003		219.8259

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0413	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347
Total	21.2419	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347

NCPWF MR - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0574	0.6906	2.2000e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		219.6767	219.6767	5.9700e-003		219.8259
Total	0.0916	0.0574	0.6906	2.2000e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		219.6767	219.6767	5.9700e-003		219.8259

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2619	19.9772	24.2003	0.0452		0.9894	0.9894		0.9247	0.9247		4,359.1852	4,359.1852	1.2382		4,390.1400
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.2619	19.9772	24.2003	0.0452		0.9894	0.9894		0.9247	0.9247		4,359.1852	4,359.1852	1.2382		4,390.1400

NCPWF MR - San Diego County APCD Air District, Summer

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0492	0.5919	1.8900e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		188.2943	188.2943	5.1100e-003		188.4222
Total	0.0785	0.0492	0.5919	1.8900e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		188.2943	188.2943	5.1100e-003		188.4222

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,359.1852	4,359.1852	1.2382		4,390.1400
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,359.1852	4,359.1852	1.2382		4,390.1400

NCPWF MR - San Diego County APCD Air District, Summer

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0492	0.5919	1.8900e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		188.2943	188.2943	5.1100e-003		188.4222
Total	0.0785	0.0492	0.5919	1.8900e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		188.2943	188.2943	5.1100e-003		188.4222

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF MR - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Unmitigated	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Unmitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF MR - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530

11.0 Vegetation

NCPWF MR - San Diego County APCD Air District, Winter

NCPWF MR

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	300.00	8.50
tblGrading	AcresOfGrading	211.50	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45

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tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	1,000.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

NCPWF MR - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	9.3473	109.8127	59.1318	0.1341	12.8389	4.3701	17.2089	6.8081	4.0228	10.8309	0.0000	13,397.8119	13,397.8119	3.7847	0.0000	13,492.4301
2020	3.5700	32.6421	26.0160	0.0597	1.4828	1.4101	2.8929	0.4016	1.3123	1.7139	0.0000	5,886.3414	5,886.3414	1.3641	0.0000	5,914.8284
2021	3.2239	29.7433	25.1596	0.0592	1.4828	1.2109	2.6936	0.4016	1.1263	1.5278	0.0000	5,836.1212	5,836.1212	1.1247	0.0000	5,864.2374
2022	21.3407	26.8195	24.7556	0.0587	1.4828	1.0329	2.5156	0.4016	0.9609	1.3624	0.0000	5,784.2320	5,784.2320	1.2430	0.0000	5,812.0874
Maximum	21.3407	109.8127	59.1318	0.1341	12.8389	4.3701	17.2089	6.8081	4.0228	10.8309	0.0000	13,397.8119	13,397.8119	3.7847	0.0000	13,492.4301

NCPWF MR - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4756	61.6139	41.9738	0.0943	2.9120	1.9573	4.8693	0.7783	1.9556	2.7339		9,890.2790	9,890.2790	1.1013	0.0000	9,917.8118

NCPWF MR - San Diego County APCD Air District, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4756	61.6139	41.9738	0.0943	2.9120	1.9573	4.8693	0.7783	1.9556	2.7339		9,890.2790	9,890.2790	1.1013	0.0000	9,917.8118

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

NCPWF MR - San Diego County APCD Air District, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	8/12/2019	5	60	
2	Finish Grading	Grading	8/13/2019	2/25/2020	5	141	
3	Building Construction	Building Construction	2/26/2020	4/22/2022	5	563	
4	Architectural Coating	Architectural Coating	5/7/2022	11/21/2022	5	141	
5	Paving	Paving	4/23/2022	5/6/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF MR - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Aerial Lifts	1	8.00	63	0.31
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF MR - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2155	0.0000	12.2155	6.6399	0.0000	6.6399			0.0000			0.0000
Off-Road	9.0201	104.0122	56.7763	0.1165		4.3462	4.3462		4.0001	4.0001		11,508.268	11,508.268	3.6264		11,598.929
Total	9.0201	104.0122	56.7763	0.1165	12.2155	4.3462	16.5617	6.6399	4.0001	10.6399		11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF MR - San Diego County APCD Air District, Winter

3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1673	5.6897	1.3029	0.0146	0.3276	0.0218	0.3494	0.0898	0.0208	0.1106		1,595.454 1	1,595.454 1	0.1488		1,599.174 2
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1599	0.1108	1.0526	2.9500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		294.0890	294.0890	9.4900e-003		294.3262
Total	0.3272	5.8005	2.3555	0.0176	0.6234	0.0239	0.6472	0.1682	0.0228	0.1910		1,889.543 0	1,889.543 0	0.1583		1,893.500 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4970	0.0000	5.4970	2.9879	0.0000	2.9879			0.0000			0.0000
Off-Road	2.8364	55.3681	64.0120	0.1165		2.2371	2.2371		2.2371	2.2371	0.0000	11,508.268 8	11,508.268 8	3.6264		11,598.929 7
Total	2.8364	55.3681	64.0120	0.1165	5.4970	2.2371	7.7341	2.9879	2.2371	5.2250	0.0000	11,508.26 88	11,508.26 88	3.6264		11,598.92 97

NCPWF MR - San Diego County APCD Air District, Winter

3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1673	5.6897	1.3029	0.0146	0.3276	0.0218	0.3494	0.0898	0.0208	0.1106		1,595.4541	1,595.4541	0.1488		1,599.1742
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1599	0.1108	1.0526	2.9500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		294.0890	294.0890	9.4900e-003		294.3262
Total	0.3272	5.8005	2.3555	0.0176	0.6234	0.0239	0.6472	0.1682	0.0228	0.1910		1,889.5430	1,889.5430	0.1583		1,893.5004

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0729	0.0000	0.0729	8.2600e-003	0.0000	8.2600e-003			0.0000			0.0000
Off-Road	2.8077	31.8604	18.9226	0.0422		1.3102	1.3102		1.2070	1.2070		4,149.2157	4,149.2157	1.2981		4,181.6684
Total	2.8077	31.8604	18.9226	0.0422	0.0729	1.3102	1.3831	8.2600e-003	1.2070	1.2152		4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF MR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0712	2.4212	0.5544	6.2200e-003	0.1812	9.2600e-003	0.1905	0.0485	8.8500e-003	0.0573		678.9166	678.9166	0.0633		680.4997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	0.1511	2.4765	1.0807	7.7000e-003	0.3291	0.0103	0.3394	0.0877	9.8200e-003	0.0975		825.9611	825.9611	0.0681		827.6628

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0328	0.0000	0.0328	3.7200e-003	0.0000	3.7200e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684
Total	1.0103	20.0646	23.2829	0.0422	0.0328	0.8726	0.9054	3.7200e-003	0.8726	0.8763	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF MR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0712	2.4212	0.5544	6.2200e-003	0.1812	9.2600e-003	0.1905	0.0485	8.8500e-003	0.0573		678.9166	678.9166	0.0633		680.4997
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	0.1511	2.4765	1.0807	7.7000e-003	0.3291	0.0103	0.3394	0.0877	9.8200e-003	0.0975		825.9611	825.9611	0.0681		827.6628

3.3 Finish Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0729	0.0000	0.0729	8.2600e-003	0.0000	8.2600e-003			0.0000			0.0000
Off-Road	2.6311	29.1133	18.0635	0.0422		1.1767	1.1767		1.0842	1.0842		4,058.8516	4,058.8516	1.2976		4,091.2909
Total	2.6311	29.1133	18.0635	0.0422	0.0729	1.1767	1.2496	8.2600e-003	1.0842	1.0924		4,058.8516	4,058.8516	1.2976		4,091.2909

NCPWF MR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.2472	0.5388	6.1400e-003	0.4058	7.2500e-003	0.4130	0.1036	6.9400e-003	0.1105		671.5176	671.5176	0.0622		673.0738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.1396	2.2972	1.0198	7.5700e-003	0.5536	8.2900e-003	0.5619	0.1428	7.9000e-003	0.1507		813.9214	813.9214	0.0665		815.5847

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0328	0.0000	0.0328	3.7200e-003	0.0000	3.7200e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,058.8516	4,058.8516	1.2976		4,091.2909
Total	1.0103	20.0646	23.2829	0.0422	0.0328	0.8726	0.9054	3.7200e-003	0.8726	0.8763	0.0000	4,058.8516	4,058.8516	1.2976		4,091.2909

NCPWF MR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0648	2.2472	0.5388	6.1400e-003	0.4058	7.2500e-003	0.4130	0.1036	6.9400e-003	0.1105		671.5176	671.5176	0.0622		673.0738
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.1396	2.2972	1.0198	7.5700e-003	0.5536	8.2900e-003	0.5619	0.1428	7.9000e-003	0.1507		813.9214	813.9214	0.0665		815.5847

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713
Total	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2113	6.0840	1.7215	0.0144	0.3656	0.0304	0.3959	0.1052	0.0290	0.1343		1,546.8960	1,546.8960	0.1245		1,550.0078
Worker	0.5652	0.3775	3.6346	0.0108	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,075.9395	1,075.9395	0.0324		1,076.7493
Total	0.7766	6.4616	5.3561	0.0252	1.4828	0.0382	1.5210	0.4016	0.0363	0.4378		2,622.8354	2,622.8354	0.1569		2,626.7571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2113	6.0840	1.7215	0.0144	0.3656	0.0304	0.3959	0.1052	0.0290	0.1343		1,546.8960	1,546.8960	0.1245			1,550.0078
Worker	0.5652	0.3775	3.6346	0.0108	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,075.9395	1,075.9395	0.0324			1,076.7493
Total	0.7766	6.4616	5.3561	0.0252	1.4828	0.0382	1.5210	0.4016	0.0363	0.4378		2,622.8354	2,622.8354	0.1569			2,626.7571

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754			3,288.0967
Total	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754			3,288.0967

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1721	5.4842	1.5603	0.0143	0.3656	0.0120	0.3776	0.1052	0.0115	0.1167		1,532.624 2	1,532.624 2	0.1194		1,535.609 1
Worker	0.5335	0.3431	3.3908	0.0104	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,039.784 7	1,039.784 7	0.0299		1,040.531 5
Total	0.7056	5.8272	4.9511	0.0247	1.4828	0.0197	1.5025	0.4016	0.0186	0.4202		2,572.408 9	2,572.408 9	0.1493		2,576.140 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.712 3	3,263.712 3	0.9754		3,288.096 7
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.712 3	3,263.712 3	0.9754		3,288.096 7

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1721	5.4842	1.5603	0.0143	0.3656	0.0120	0.3776	0.1052	0.0115	0.1167		1,532.624 2	1,532.624 2	0.1194		1,535.609 1
Worker	0.5335	0.3431	3.3908	0.0104	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,039.784 7	1,039.784 7	0.0299		1,040.531 5
Total	0.7056	5.8272	4.9511	0.0247	1.4828	0.0197	1.5025	0.4016	0.0186	0.4202		2,572.408 9	2,572.408 9	0.1493		2,576.140 6

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2608	21.3278	19.8684	0.0345		1.0150	1.0150		0.9440	0.9440		3,264.603 1	3,264.603 1	0.9713		3,288.885 2
Total	2.2608	21.3278	19.8684	0.0345		1.0150	1.0150		0.9440	0.9440		3,264.603 1	3,264.603 1	0.9713		3,288.885 2

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1601	5.1790	1.4773	0.0141	0.3656	0.0104	0.3759	0.1052	9.9000e-003	0.1151		1,517.9541	1,517.9541	0.1156		1,520.8437
Worker	0.5055	0.3128	3.1464	0.0101	1.1172	7.5500e-003	1.1248	0.2963	6.9500e-003	0.3033		1,001.6748	1,001.6748	0.0274		1,002.3585
Total	0.6656	5.4917	4.6237	0.0241	1.4828	0.0179	1.5007	0.4016	0.0169	0.4184		2,519.6289	2,519.6289	0.1429		2,523.2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,264.6030	3,264.6030	0.9713		3,288.8852
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,264.6030	3,264.6030	0.9713		3,288.8852

NCPWF MR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1601	5.1790	1.4773	0.0141	0.3656	0.0104	0.3759	0.1052	9.9000e-003	0.1151		1,517.9541	1,517.9541	0.1156		1,520.8437
Worker	0.5055	0.3128	3.1464	0.0101	1.1172	7.5500e-003	1.1248	0.2963	6.9500e-003	0.3033		1,001.6748	1,001.6748	0.0274		1,002.3585
Total	0.6656	5.4917	4.6237	0.0241	1.4828	0.0179	1.5007	0.4016	0.0169	0.4184		2,519.6289	2,519.6289	0.1429		2,523.2023

3.5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0361	0.5603	1.0940	1.6800e-003		0.0104	0.0104		9.5700e-003	9.5700e-003		162.6199	162.6199	0.0526		163.9347
Total	21.2367	0.5603	1.0940	1.6800e-003		0.0104	0.0104		9.5700e-003	9.5700e-003		162.6199	162.6199	0.0526		163.9347

NCPWF MR - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1041	0.0644	0.6478	2.0700e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		206.2272	206.2272	5.6300e-003		206.3679
Total	0.1041	0.0644	0.6478	2.0700e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		206.2272	206.2272	5.6300e-003		206.3679

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2006					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0413	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347
Total	21.2419	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347

NCPWF MR - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1041	0.0644	0.6478	2.0700e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		206.2272	206.2272	5.6300e-003		206.3679
Total	0.1041	0.0644	0.6478	2.0700e-003	0.2300	1.5500e-003	0.2316	0.0610	1.4300e-003	0.0624		206.2272	206.2272	5.6300e-003		206.3679

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2619	19.9772	24.2003	0.0452		0.9894	0.9894		0.9247	0.9247		4,359.1852	4,359.1852	1.2382		4,390.1400
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.2619	19.9772	24.2003	0.0452		0.9894	0.9894		0.9247	0.9247		4,359.1852	4,359.1852	1.2382		4,390.1400

NCPWF MR - San Diego County APCD Air District, Winter

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0552	0.5552	1.7700e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		176.7661	176.7661	4.8300e-003		176.8868
Total	0.0892	0.0552	0.5552	1.7700e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		176.7661	176.7661	4.8300e-003		176.8868

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,359.1852	4,359.1852	1.2382		4,390.1400
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,359.1852	4,359.1852	1.2382		4,390.1400

NCPWF MR - San Diego County APCD Air District, Winter

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0552	0.5552	1.7700e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		176.7661	176.7661	4.8300e-003		176.8868
Total	0.0892	0.0552	0.5552	1.7700e-003	0.1972	1.3300e-003	0.1985	0.0523	1.2300e-003	0.0535		176.7661	176.7661	4.8300e-003		176.8868

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF MR - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Unmitigated	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

NCPWF MR - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF MR - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

NCPWF MR - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Unmitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

NCPWF MR - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF MR - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

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tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0693	0.6169	0.4900	1.0200e-003	0.0302	0.0312	0.0613	6.7200e-003	0.0293	0.0361	0.0000	92.1053	92.1053	0.0206	0.0000	92.6191
2019	0.4878	4.2617	3.5616	7.6300e-003	0.0694	0.2085	0.2779	0.0175	0.1974	0.2149	0.0000	677.6122	677.6122	0.1532	0.0000	681.4413
2020	0.4091	3.7641	3.2287	5.9500e-003	0.0333	0.1956	0.2290	8.8500e-003	0.1838	0.1926	0.0000	517.3154	517.3154	0.1274	0.0000	520.5000
2021	0.2731	2.4184	2.4939	4.6700e-003	0.0273	0.1262	0.1535	7.2400e-003	0.1181	0.1253	0.0000	409.4421	409.4421	0.1068	0.0000	412.1115
Maximum	0.4878	4.2617	3.5616	7.6300e-003	0.0694	0.2085	0.2779	0.0175	0.1974	0.2149	0.0000	677.6122	677.6122	0.1532	0.0000	681.4413

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0250	0.4770	0.5513	1.0200e-003	0.0261	0.0229	0.0490	6.2100e-003	0.0229	0.0291	0.0000	92.1052	92.1052	0.0206	0.0000	92.6190
2019	0.1901	3.5757	4.2110	7.6300e-003	0.0653	0.1780	0.2432	0.0170	0.1779	0.1949	0.0000	677.6115	677.6115	0.1532	0.0000	681.4406
2020	0.1512	2.7734	3.8156	5.9500e-003	0.0333	0.1491	0.1824	8.8500e-003	0.1491	0.1579	0.0000	517.3148	517.3148	0.1274	0.0000	520.4994
2021	0.1151	2.1922	3.0019	4.6700e-003	0.0273	0.1227	0.1500	7.2400e-003	0.1227	0.1300	0.0000	409.4416	409.4416	0.1068	0.0000	412.1110
Maximum	0.1901	3.5757	4.2110	7.6300e-003	0.0653	0.1780	0.2432	0.0170	0.1779	0.1949	0.0000	677.6115	677.6115	0.1532	0.0000	681.4406

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	61.16	18.47	-18.47	0.00	5.12	15.82	13.45	2.51	10.60	10.03	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-14-2018	2-13-2019	1.2602	0.9655
2	2-14-2019	5-13-2019	1.1486	0.9285
3	5-14-2019	8-13-2019	1.1860	0.9585
4	8-14-2019	11-13-2019	0.0902	0.0729
10	2-14-2021	5-13-2021	0.5469	0.4914
11	5-14-2021	8-13-2021	0.6985	0.6276
12	8-14-2021	9-30-2021	0.3644	0.3275
		Highest	1.2602	0.9655

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8000e-004	3.0000e-005	2.9600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2000e-004	2.0000e-005	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.14	33.33	41.89	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.07	46.07	50.00	0.00	46.81

3.0 Construction Detail

Construction Phase

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4500e-003	0.0000	7.4500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0646	0.5447	0.4546	7.9000e-004		0.0308	0.0308		0.0290	0.0290	0.0000	69.8588	69.8588	0.0189	0.0000	70.3299
Total	0.0646	0.5447	0.4546	7.9000e-004	7.4500e-003	0.0308	0.0383	9.2000e-004	0.0290	0.0300	0.0000	69.8588	69.8588	0.0189	0.0000	70.3299

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3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-003	0.0700	0.0146	1.7000e-004	0.0172	2.7000e-004	0.0175	4.3400e-003	2.6000e-004	4.6000e-003	0.0000	16.9935	16.9935	1.5300e-003	0.0000	17.0319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	2.2200e-003	0.0208	6.0000e-005	5.5100e-003	4.0000e-005	5.5500e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.2529	5.2529	1.8000e-004	0.0000	5.2573
Total	4.6500e-003	0.0722	0.0354	2.3000e-004	0.0227	3.1000e-004	0.0231	5.8000e-003	3.0000e-004	6.1000e-003	0.0000	22.2465	22.2465	1.7100e-003	0.0000	22.2892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3500e-003	0.0000	3.3500e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.4048	0.5159	7.9000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	69.8587	69.8587	0.0189	0.0000	70.3298
Total	0.0203	0.4048	0.5159	7.9000e-004	3.3500e-003	0.0226	0.0259	4.1000e-004	0.0226	0.0230	0.0000	69.8587	69.8587	0.0189	0.0000	70.3298

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3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-003	0.0700	0.0146	1.7000e-004	0.0172	2.7000e-004	0.0175	4.3400e-003	2.6000e-004	4.6000e-003	0.0000	16.9935	16.9935	1.5300e-003	0.0000	17.0319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	2.2200e-003	0.0208	6.0000e-005	5.5100e-003	4.0000e-005	5.5500e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.2529	5.2529	1.8000e-004	0.0000	5.2573
Total	4.6500e-003	0.0722	0.0354	2.3000e-004	0.0227	3.1000e-004	0.0231	5.8000e-003	3.0000e-004	6.1000e-003	0.0000	22.2465	22.2465	1.7100e-003	0.0000	22.2892

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4500e-003	0.0000	7.4500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2807	2.3694	2.1796	3.8500e-003		0.1291	0.1291		0.1216	0.1216	0.0000	336.7294	336.7294	0.0909	0.0000	339.0018
Total	0.2807	2.3694	2.1796	3.8500e-003	7.4500e-003	0.1291	0.1366	9.2000e-004	0.1216	0.1226	0.0000	336.7294	336.7294	0.0909	0.0000	339.0018

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3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2500e-003	0.3227	0.0704	8.3000e-004	0.0208	1.2100e-003	0.0220	5.6300e-003	1.1500e-003	6.7800e-003	0.0000	82.0800	82.0800	7.4300e-003	0.0000	82.2658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	9.6900e-003	0.0914	2.8000e-004	0.0269	1.9000e-004	0.0271	7.1500e-003	1.7000e-004	7.3200e-003	0.0000	24.8723	24.8723	7.7000e-004	0.0000	24.8917
Total	0.0212	0.3323	0.1618	1.1100e-003	0.0477	1.4000e-003	0.0491	0.0128	1.3200e-003	0.0141	0.0000	106.9523	106.9523	8.2000e-003	0.0000	107.1574

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3500e-003	0.0000	3.3500e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0992	1.9762	2.5186	3.8500e-003		0.1102	0.1102		0.1102	0.1102	0.0000	336.7290	336.7290	0.0909	0.0000	339.0014
Total	0.0992	1.9762	2.5186	3.8500e-003	3.3500e-003	0.1102	0.1136	4.1000e-004	0.1102	0.1106	0.0000	336.7290	336.7290	0.0909	0.0000	339.0014

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3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2500e-003	0.3227	0.0704	8.3000e-004	0.0208	1.2100e-003	0.0220	5.6300e-003	1.1500e-003	6.7800e-003	0.0000	82.0800	82.0800	7.4300e-003	0.0000	82.2658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	9.6900e-003	0.0914	2.8000e-004	0.0269	1.9000e-004	0.0271	7.1500e-003	1.7000e-004	7.3200e-003	0.0000	24.8723	24.8723	7.7000e-004	0.0000	24.8917
Total	0.0212	0.3323	0.1618	1.1100e-003	0.0477	1.4000e-003	0.0491	0.0128	1.3200e-003	0.0141	0.0000	106.9523	106.9523	8.2000e-003	0.0000	107.1574

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1796	1.5549	1.1719	2.5300e-003		0.0779	0.0779		0.0744	0.0744	0.0000	220.7913	220.7913	0.0537	0.0000	222.1326
Total	0.1796	1.5549	1.1719	2.5300e-003		0.0779	0.0779		0.0744	0.0744	0.0000	220.7913	220.7913	0.0537	0.0000	222.1326

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3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494
Total	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0634	1.2621	1.4822	2.5300e-003		0.0663	0.0663		0.0663	0.0663	0.0000	220.7911	220.7911	0.0537	0.0000	222.1324
Total	0.0634	1.2621	1.4822	2.5300e-003		0.0663	0.0663		0.0663	0.0663	0.0000	220.7911	220.7911	0.0537	0.0000	222.1324

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3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494
Total	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1811	1.5680	1.2683	2.8000e-003		0.0751	0.0751		0.0717	0.0717	0.0000	240.5781	240.5781	0.0585	0.0000	242.0410
Total	0.1811	1.5680	1.2683	2.8000e-003		0.0751	0.0751		0.0717	0.0717	0.0000	240.5781	240.5781	0.0585	0.0000	242.0410

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3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738
Total	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0701	1.3950	1.6383	2.8000e-003		0.0732	0.0732		0.0732	0.0732	0.0000	240.5778	240.5778	0.0585	0.0000	242.0407
Total	0.0701	1.3950	1.6383	2.8000e-003		0.0732	0.0732		0.0732	0.0732	0.0000	240.5778	240.5778	0.0585	0.0000	242.0407

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3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738
Total	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2142	2.1853	1.8568	2.8200e-003		0.1203	0.1203		0.1119	0.1119	0.0000	246.9025	246.9025	0.0680	0.0000	248.6026
Total	0.2142	2.1853	1.8568	2.8200e-003		0.1203	0.1203		0.1119	0.1119	0.0000	246.9025	246.9025	0.0680	0.0000	248.6026

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3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827
Total	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0673	1.3676	2.0737	2.8200e-003		0.0756	0.0756		0.0756	0.0756	0.0000	246.9022	246.9022	0.0680	0.0000	248.6023
Total	0.0673	1.3676	2.0737	2.8200e-003		0.0756	0.0756		0.0756	0.0756	0.0000	246.9022	246.9022	0.0680	0.0000	248.6023

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3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827
Total	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0506	0.5109	0.5017	7.7000e-004		0.0275	0.0275		0.0256	0.0256	0.0000	67.6037	67.6037	0.0186	0.0000	68.0676
Total	0.0506	0.5109	0.5017	7.7000e-004		0.0275	0.0275		0.0256	0.0256	0.0000	67.6037	67.6037	0.0186	0.0000	68.0676

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3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772
Total	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0184	0.3746	0.5680	7.7000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	67.6037	67.6037	0.0186	0.0000	68.0675
Total	0.0184	0.3746	0.5680	7.7000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	67.6037	67.6037	0.0186	0.0000	68.0675

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3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772
Total	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2118	1.8994	1.9130	3.6400e-003		0.0985	0.0985		0.0923	0.0923	0.0000	318.2487	318.2487	0.0876	0.0000	320.4379
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2118	1.8994	1.9130	3.6400e-003		0.0985	0.0985		0.0923	0.0923	0.0000	318.2487	318.2487	0.0876	0.0000	320.4379

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3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288
Total	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0860	1.8096	2.3546	3.6400e-003		0.1018	0.1018		0.1018	0.1018	0.0000	318.2484	318.2484	0.0876	0.0000	320.4376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0860	1.8096	2.3546	3.6400e-003		0.1018	0.1018		0.1018	0.1018	0.0000	318.2484	318.2484	0.0876	0.0000	320.4376

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3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288
Total	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Unmitigated	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003
Total	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Total	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.0717	36.1949	28.8800	0.0602	1.4470	1.8322	3.2792	0.3590	1.7257	2.0847	0.0000	5,998.7476	5,998.7476	1.3317	0.0000	6,032.0413
2019	3.9106	32.8313	28.2650	0.0599	0.6626	1.6420	2.2348	0.1665	1.5672	1.6485	0.0000	5,918.4229	5,918.4229	1.3152	0.0000	5,951.3025
2020	3.5714	29.9554	25.1583	0.0564	0.3066	1.5333	1.7633	0.0813	1.4264	1.4874	0.0000	5,362.8238	5,362.8238	1.2376	0.0000	5,393.7649
2021	2.4399	23.8250	24.0367	0.0387	0.2299	1.2811	1.5110	0.0610	1.1921	1.2530	0.0000	3,733.8994	3,733.8994	0.9716	0.0000	3,758.1882
Maximum	4.0717	36.1949	28.8800	0.0602	1.4470	1.8322	3.2792	0.3590	1.7257	2.0847	0.0000	5,998.7476	5,998.7476	1.3317	0.0000	6,032.0413

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1000e-003	3.0000e-004	0.0329	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004	0.0000	0.0749

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.3100e-003	1.7000e-004	0.0191	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005	0.0000	0.0398

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.74	43.33	42.08	0.00	0.00	58.33	58.33	0.00	58.33	58.33	0.00	46.10	46.10	57.89	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.8025	32.0419	26.7394	0.0464		1.8140	1.8140		1.7084	1.7084		4,529.7709	4,529.7709	1.2220		4,560.3202
Total	3.8025	32.0419	26.7394	0.0464	0.0745	1.8140	1.8885	9.2000e-003	1.7084	1.7176		4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1161	4.0348	0.8321	0.0102	1.0405	0.0159	1.0564	0.2617	0.0152	0.2769		1,109.626 1	1,109.626 1	0.0978		1,112.0715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.2692	4.1530	2.1406	0.0138	1.3726	0.0182	1.3908	0.3498	0.0173	0.3671		1,468.976 7	1,468.976 7	0.1098		1,471.721 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,529.770 9	4,529.770 9	1.2220		4,560.320 2
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,529.770 9	4,529.770 9	1.2220		4,560.320 2

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1161	4.0348	0.8321	0.0102	1.0405	0.0159	1.0564	0.2617	0.0152	0.2769		1,109.626 1	1,109.626 1	0.0978		1,112.0715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.2692	4.1530	2.1406	0.0138	1.3726	0.0182	1.3908	0.3498	0.0173	0.3671		1,468.976 7	1,468.976 7	0.1098		1,471.721 1

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.055 1	4,472.055 1	1.2072		4,502.234 8
Total	3.3824	28.5469	26.2597	0.0464	0.0745	1.5556	1.6301	9.2000e-003	1.4655	1.4747		4,472.055 1	4,472.055 1	1.2072		4,502.234 8

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1101	3.8102	0.8225	0.0101	0.2560	0.0144	0.2704	0.0692	0.0138	0.0829		1,097.8521	1,097.8521	0.0972		1,100.2810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.2514	3.9160	2.0053	0.0136	0.5881	0.0167	0.6048	0.1573	0.0159	0.1731		1,446.3679	1,446.3679	0.1080		1,449.0677

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1101	3.8102	0.8225	0.0101	0.2560	0.0144	0.2704	0.0692	0.0138	0.0829		1,097.8521	1,097.8521	0.0972		1,100.2810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.2514	3.9160	2.0053	0.0136	0.5881	0.0167	0.6048	0.1573	0.0159	0.1731		1,446.3679	1,446.3679	0.1080		1,449.0677

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329
Total	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569
Total	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569
Total	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903
Total	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747
Total	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747
Total	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226
Total	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454
Total	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Unmitigated	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Total	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Total	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.0988	36.2526	28.8501	0.0598	1.4470	1.8325	3.2796	0.3590	1.7261	2.0851	0.0000	5,958.204 2	5,958.204 2	1.3347	0.0000	5,991.572 0
2019	3.9312	32.8432	28.2358	0.0595	0.6626	1.6420	2.2352	0.1665	1.5672	1.6485	0.0000	5,878.468 1	5,878.468 1	1.3180	0.0000	5,911.4192
2020	3.5909	29.9662	25.0817	0.0562	0.3066	1.5333	1.7633	0.0813	1.4264	1.4874	0.0000	5,343.617 3	5,343.617 3	1.2371	0.0000	5,374.544 3
2021	2.4539	23.8323	23.9812	0.0385	0.2299	1.2811	1.5110	0.0610	1.1921	1.2530	0.0000	3,719.975 1	3,719.975 1	0.9712	0.0000	3,744.253 9
Maximum	4.0988	36.2526	28.8501	0.0598	1.4470	1.8325	3.2796	0.3590	1.7261	2.0851	0.0000	5,958.204 2	5,958.204 2	1.3347	0.0000	5,991.572 0

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1000e-003	3.0000e-004	0.0329	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004	0.0000	0.0749

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.3100e-003	1.7000e-004	0.0191	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005	0.0000	0.0398

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.74	43.33	42.08	0.00	0.00	58.33	58.33	0.00	58.33	58.33	0.00	46.10	46.10	57.89	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.8025	32.0419	26.7394	0.0464		1.8140	1.8140		1.7084	1.7084		4,529.7709	4,529.7709	1.2220		4,560.3202
Total	3.8025	32.0419	26.7394	0.0464	0.0745	1.8140	1.8885	9.2000e-003	1.7084	1.7176		4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1194	4.0779	0.8947	0.0100	1.0405	0.0163	1.0567	0.2617	0.0155	0.2773		1,091.2129	1,091.2129	0.1015		1,093.7498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.2963	4.2106	2.1107	0.0134	1.3726	0.0186	1.3911	0.3498	0.0177	0.3675		1,428.4332	1,428.4332	0.1128		1,431.2519

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,529.7709	4,529.7709	1.2220		4,560.3202
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1194	4.0779	0.8947	0.0100	1.0405	0.0163	1.0567	0.2617	0.0155	0.2773		1,091.2129	1,091.2129	0.1015		1,093.7498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.2963	4.2106	2.1107	0.0134	1.3726	0.0186	1.3911	0.3498	0.0177	0.3675		1,428.4332	1,428.4332	0.1128		1,431.2519

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464	0.0745	1.5556	1.6301	9.2000e-003	1.4655	1.4747		4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1132	3.8493	0.8814	9.9000e-003	0.2560	0.0147	0.2707	0.0692	0.0141	0.0833		1,079.3779	1,079.3779	0.1007		1,081.8947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.2768	3.9680	1.9762	0.0132	0.5881	0.0170	0.6051	0.1573	0.0162	0.1734		1,406.4130	1,406.4130	0.1109		1,409.1844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1132	3.8493	0.8814	9.9000e-003	0.2560	0.0147	0.2707	0.0692	0.0141	0.0833		1,079.3779	1,079.3779	0.1007		1,081.8947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.2768	3.9680	1.9762	0.0132	0.5881	0.0170	0.6051	0.1573	0.0162	0.1734		1,406.4130	1,406.4130	0.1109		1,409.1844

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329
Total	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136
Total	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136
Total	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903
Total	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540
Total	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540
Total	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226
Total	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454
Total	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Unmitigated	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Total	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Total	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

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tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0337	0.4078	0.2280	4.4000e-004	1.7000e-003	0.0166	0.0183	4.5000e-004	0.0153	0.0158	0.0000	40.2875	40.2875	0.0121	0.0000	40.5898
2019	0.2098	2.0944	1.4040	2.4800e-003	0.0144	0.1089	0.1233	3.8200e-003	0.1014	0.1052	0.0000	221.1154	221.1154	0.0591	0.0000	222.5921
2020	0.0811	0.6561	0.5127	8.9000e-004	3.2200e-003	0.0347	0.0379	8.7000e-004	0.0326	0.0335	0.0000	74.5230	74.5230	0.0195	0.0000	75.0108
Maximum	0.2098	2.0944	1.4040	2.4800e-003	0.0144	0.1089	0.1233	3.8200e-003	0.1014	0.1052	0.0000	221.1154	221.1154	0.0591	0.0000	222.5921

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0112	0.2060	0.2433	4.4000e-004	1.7000e-003	8.7500e-003	0.0104	4.5000e-004	8.7500e-003	9.2000e-003	0.0000	40.2874	40.2874	0.0121	0.0000	40.5897
2019	0.0619	1.1523	1.5031	2.4800e-003	0.0144	0.0603	0.0747	3.8200e-003	0.0603	0.0642	0.0000	221.1152	221.1152	0.0591	0.0000	222.5919
2020	0.0263	0.4812	0.5349	8.9000e-004	3.2200e-003	0.0269	0.0302	8.7000e-004	0.0269	0.0278	0.0000	74.5230	74.5230	0.0195	0.0000	75.0108
Maximum	0.0619	1.1523	1.5031	2.4800e-003	0.0144	0.0603	0.0747	3.8200e-003	0.0603	0.0642	0.0000	221.1152	221.1152	0.0591	0.0000	222.5919

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	69.38	41.76	-6.37	0.00	0.00	40.07	35.77	0.00	35.67	34.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-14-2018	2-13-2019	0.8178	0.4200
2	2-14-2019	5-13-2019	0.4063	0.2190
		Highest	0.8178	0.4200

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	50.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0329	0.4071	0.2217	4.2000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	38.6712	38.6712	0.0120	0.0000	38.9722
Total	0.0329	0.4071	0.2217	4.2000e-004	0.0000	0.0166	0.0166	0.0000	0.0153	0.0153	0.0000	38.6712	38.6712	0.0120	0.0000	38.9722

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3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176
Total	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.2054	0.2369	4.2000e-004		8.7400e-003	8.7400e-003		8.7400e-003	8.7400e-003	0.0000	38.6711	38.6711	0.0120	0.0000	38.9721
Total	0.0104	0.2054	0.2369	4.2000e-004	0.0000	8.7400e-003	8.7400e-003	0.0000	8.7400e-003	8.7400e-003	0.0000	38.6711	38.6711	0.0120	0.0000	38.9721

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3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176
Total	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0589	0.7204	0.4027	8.2000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	73.7945	73.7945	0.0234	0.0000	74.3781
Total	0.0589	0.7204	0.4027	8.2000e-004	0.0000	0.0288	0.0288	0.0000	0.0265	0.0265	0.0000	73.7945	73.7945	0.0234	0.0000	74.3781

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3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451
Total	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0202	0.3986	0.4599	8.2000e-004		0.0170	0.0170		0.0170	0.0170	0.0000	73.7944	73.7944	0.0234	0.0000	74.3781
Total	0.0202	0.3986	0.4599	8.2000e-004	0.0000	0.0170	0.0170	0.0000	0.0170	0.0170	0.0000	73.7944	73.7944	0.0234	0.0000	74.3781

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3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451
Total	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1335	1.2578	0.8431	1.3600e-003		0.0726	0.0726		0.0679	0.0679	0.0000	120.7680	120.7680	0.0311	0.0000	121.5459
Total	0.1335	1.2578	0.8431	1.3600e-003	0.0000	0.0726	0.0726	0.0000	0.0679	0.0679	0.0000	120.7680	120.7680	0.0311	0.0000	121.5459

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3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742
Total	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0318	0.6661	0.8831	1.3600e-003		0.0375	0.0375		0.0375	0.0375	0.0000	120.7679	120.7679	0.0311	0.0000	121.5457
Total	0.0318	0.6661	0.8831	1.3600e-003	0.0000	0.0375	0.0375	0.0000	0.0375	0.0375	0.0000	120.7679	120.7679	0.0311	0.0000	121.5457

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3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742
Total	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1110	0.1094	1.5000e-004		7.4100e-003	7.4100e-003		6.8200e-003	6.8200e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572
Total	0.0111	0.1110	0.1094	1.5000e-004	0.0000	7.4100e-003	7.4100e-003	0.0000	6.8200e-003	6.8200e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572

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3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916
Total	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6100e-003	0.0824	0.1113	1.5000e-004		5.7700e-003	5.7700e-003		5.7700e-003	5.7700e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572
Total	3.6100e-003	0.0824	0.1113	1.5000e-004	0.0000	5.7700e-003	5.7700e-003	0.0000	5.7700e-003	5.7700e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572

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3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916
Total	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	5.2600e-003	5.7000e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.1000e-004	3.1000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877
Total	5.2000e-004	5.2600e-003	5.7000e-003	1.0000e-005	0.0000	3.3000e-004	3.3000e-004	0.0000	3.1000e-004	3.1000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877

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3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117
Total	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9000e-004	4.3400e-003	5.8600e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877
Total	1.9000e-004	4.3400e-003	5.8600e-003	1.0000e-005	0.0000	3.0000e-004	3.0000e-004	0.0000	3.0000e-004	3.0000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877

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3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117
Total	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0674	0.5320	0.3965	7.0000e-004		0.0265	0.0265		0.0250	0.0250	0.0000	57.8110	57.8110	0.0154	0.0000	58.1958
Total	0.0674	0.5320	0.3965	7.0000e-004		0.0265	0.0265		0.0250	0.0250	0.0000	57.8110	57.8110	0.0154	0.0000	58.1958

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3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0109	2.8900e-003	3.0000e-005	6.0000e-004	5.0000e-005	6.5000e-004	1.7000e-004	5.0000e-005	2.2000e-004	0.0000	2.4361	2.4361	1.9000e-004	0.0000	2.4409
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	8.8000e-004	0.0113	6.7700e-003	4.0000e-005	1.8500e-003	6.0000e-005	1.9100e-003	5.0000e-004	6.0000e-005	5.6000e-004	0.0000	3.5523	3.5523	2.2000e-004	0.0000	3.5579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0215	0.3928	0.4204	7.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	57.8109	57.8109	0.0154	0.0000	58.1957
Total	0.0215	0.3928	0.4204	7.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	57.8109	57.8109	0.0154	0.0000	58.1957

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3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0109	2.8900e-003	3.0000e-005	6.0000e-004	5.0000e-005	6.5000e-004	1.7000e-004	5.0000e-005	2.2000e-004	0.0000	2.4361	2.4361	1.9000e-004	0.0000	2.4409
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	8.8000e-004	0.0113	6.7700e-003	4.0000e-005	1.8500e-003	6.0000e-005	1.9100e-003	5.0000e-004	6.0000e-005	5.6000e-004	0.0000	3.5523	3.5523	2.2000e-004	0.0000	3.5579

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1071	0.0995	1.3000e-004		7.8100e-003	7.8100e-003		7.1800e-003	7.1800e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409
Total	0.0118	0.1071	0.0995	1.3000e-004		7.8100e-003	7.8100e-003		7.1800e-003	7.1800e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409

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3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1700e-003	0.0723	0.0976	1.3000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409
Total	3.1700e-003	0.0723	0.0976	1.3000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409

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3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.9798	23.9852	13.4407	0.0260	0.1022	0.9780	1.0802	0.0271	0.8998	0.9269	0.0000	2,618.0795	2,618.0795	0.7843	0.0000	2,637.6871
2019	2.7454	25.2121	17.4981	0.0291	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,850.1419	2,850.1419	0.7832	0.0000	2,867.4358
2020	1.3643	10.8625	8.0672	0.0148	0.0511	0.5304	0.5681	0.0136	0.5019	0.5122	0.0000	1,354.8194	1,354.8194	0.3442	0.0000	1,363.4248
Maximum	2.7454	25.2121	17.4981	0.0291	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,850.1419	2,850.1419	0.7843	0.0000	2,867.4358

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.6582	12.1160	14.3385	0.0260	0.1022	0.5147	0.6168	0.0271	0.5146	0.5417	0.0000	2,618.0795	2,618.0795	0.7843	0.0000	2,637.6871
2019	0.7111	13.3794	18.2991	0.0291	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,850.1419	2,850.1419	0.7832	0.0000	2,867.4358
2020	0.4467	8.0793	8.5457	0.0148	0.0511	0.4311	0.4689	0.0136	0.4311	0.4414	0.0000	1,354.8194	1,354.8194	0.3442	0.0000	1,363.4248
Maximum	0.7111	13.3794	18.2991	0.0291	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,850.1419	2,850.1419	0.7843	0.0000	2,867.4358

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	70.18	44.10	-5.58	0.00	0.00	42.70	38.55	0.00	38.55	37.40	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.0000e-005	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	50.00	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.67	46.67	0.00	0.00	45.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9327	23.9488	13.0381	0.0249		0.9773	0.9773		0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7
Total	1.9327	23.9488	13.0381	0.0249	0.0000	0.9773	0.9773	0.0000	0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614
Total	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614
Total	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

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3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

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3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

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3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969
Total	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969

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3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0172	0.2231	0.1381	7.7000e-004	0.0378	1.1700e-003	0.0390	0.0103	1.1200e-003	0.0114		80.3058	80.3058	4.8900e-003		80.4278

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969
Total	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969

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3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0172	0.2231	0.1381	7.7000e-004	0.0378	1.1700e-003	0.0390	0.0103	1.1200e-003	0.0114		80.3058	80.3058	4.8900e-003		80.4278

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235
Total	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235

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3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235
Total	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235

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3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Unmitigated	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Total	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Total	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.9871	23.9896	13.4123	0.0260	0.1022	0.9780	1.0802	0.0271	0.8998	0.9269	0.0000	2,611.2703	2,611.2703	0.7841	0.0000	2,630.8725
2019	2.7574	25.2190	17.4507	0.0290	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,838.5754	2,838.5754	0.7830	0.0000	2,855.8605
2020	1.3663	10.8628	8.0671	0.0147	0.0511	0.5304	0.5682	0.0136	0.5019	0.5122	0.0000	1,351.7033	1,351.7033	0.3444	0.0000	1,360.3143
Maximum	2.7574	25.2190	17.4507	0.0290	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,838.5754	2,838.5754	0.7841	0.0000	2,855.8605

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.6655	12.1205	14.3100	0.0260	0.1022	0.5147	0.6168	0.0271	0.5146	0.5417	0.0000	2,611.2703	2,611.2703	0.7841	0.0000	2,630.8725
2019	0.7231	13.3864	18.2517	0.0290	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,838.5754	2,838.5754	0.7830	0.0000	2,855.8605
2020	0.4487	8.0797	8.5457	0.0147	0.0511	0.4312	0.4689	0.0136	0.4311	0.4414	0.0000	1,351.7033	1,351.7033	0.3444	0.0000	1,360.3143
Maximum	0.7231	13.3864	18.2517	0.0290	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,838.5754	2,838.5754	0.7841	0.0000	2,855.8605

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	69.93	44.09	-5.59	0.00	0.00	42.70	38.55	0.00	38.55	37.40	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.0000e-005	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	50.00	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.67	46.67	0.00	0.00	45.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9327	23.9488	13.0381	0.0249		0.9773	0.9773		0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7
Total	1.9327	23.9488	13.0381	0.0249	0.0000	0.9773	0.9773	0.0000	0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468
Total	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468
Total	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969
Total	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0192	0.2235	0.1380	7.3000e-004	0.0378	1.2000e-003	0.0390	0.0103	1.1400e-003	0.0114		77.1897	77.1897	5.1100e-003		77.3174

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969
Total	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0192	0.2235	0.1380	7.3000e-004	0.0378	1.2000e-003	0.0390	0.0103	1.1400e-003	0.0114		77.1897	77.1897	5.1100e-003		77.3174

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235
Total	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235
Total	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Unmitigated	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Total	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Total	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

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tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

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tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1250	1.2664	0.7532	1.3300e-003	4.2300e-003	0.0640	0.0682	1.1300e-003	0.0596	0.0607	0.0000	119.9844	119.9844	0.0321	0.0000	120.7863
2019	0.4234	4.2925	2.8428	5.8400e-003	0.5106	0.2038	0.7144	0.2642	0.1899	0.4541	0.0000	523.5068	523.5068	0.1204	0.0000	526.5171
2020	0.3724	3.2921	2.8030	6.4000e-003	0.1419	0.1541	0.2960	0.0385	0.1472	0.1857	0.0000	568.2134	568.2134	0.0763	0.0000	570.1206
2021	1.3322	1.9430	1.8239	3.8600e-003	0.0675	0.0898	0.1572	0.0182	0.0849	0.1031	0.0000	340.8575	340.8575	0.0615	0.0000	342.3938
Maximum	1.3322	4.2925	2.8428	6.4000e-003	0.5106	0.2038	0.7144	0.2642	0.1899	0.4541	0.0000	568.2134	568.2134	0.1204	0.0000	570.1206

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0486	0.7467	0.8288	1.3300e-003	4.2300e-003	0.0361	0.0403	1.1300e-003	0.0352	0.0364	0.0000	119.9843	119.9843	0.0321	0.0000	120.7862
2019	0.2441	3.2311	2.9549	5.8400e-003	0.2621	0.1500	0.4121	0.1277	0.1439	0.2716	0.0000	523.5063	523.5063	0.1204	0.0000	526.5166
2020	0.2506	2.8336	2.8922	6.4000e-003	0.1419	0.1389	0.2808	0.0385	0.1346	0.1731	0.0000	568.2130	568.2130	0.0763	0.0000	570.1203
2021	1.2504	1.6290	1.9528	3.8600e-003	0.0675	0.0802	0.1476	0.0182	0.0780	0.0962	0.0000	340.8572	340.8572	0.0615	0.0000	342.3935
Maximum	1.2504	3.2311	2.9549	6.4000e-003	0.2621	0.1500	0.4121	0.1277	0.1439	0.2716	0.0000	568.2130	568.2130	0.1204	0.0000	570.1203

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	20.39	21.81	-4.93	0.00	34.31	20.82	28.73	42.40	18.63	28.16	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2018	12-31-2018	1.3857	0.7921
2	1-1-2019	3-31-2019	1.2477	0.8166
3	4-1-2019	6-30-2019	1.2268	0.9125
4	7-1-2019	9-30-2019	1.2249	0.9159
5	10-1-2019	12-31-2019	1.0080	0.8239
6	1-1-2020	3-31-2020	0.9093	0.7653
7	4-1-2020	6-30-2020	0.9065	0.7626
8	7-1-2020	9-30-2020	0.9165	0.7710

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9	10-1-2020	12-31-2020	0.9192	0.7737
10	1-1-2021	3-31-2021	0.8173	0.7103
11	4-1-2021	6-30-2021	0.3985	0.3461
12	7-1-2021	9-30-2021	1.1520	1.0196
		Highest	1.3857	1.0196

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Waste						0.0000	0.0000		0.0000	0.0000	1.7924	0.0000	1.7924	0.1059	0.0000	4.4406
Water						0.0000	0.0000		0.0000	0.0000	0.0990	1.3277	1.4267	0.0102	2.5000e-004	1.7570
Total	1.0663	0.0632	0.1807	6.2000e-004	0.0524	6.2000e-004	0.0530	0.0140	5.9000e-004	0.0146	1.8914	58.2219	60.1133	0.1191	2.5000e-004	63.1658

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Waste						0.0000	0.0000		0.0000	0.0000	1.7924	0.0000	1.7924	0.1059	0.0000	4.4406
Water						0.0000	0.0000		0.0000	0.0000	0.0990	1.3277	1.4267	0.0102	2.5000e-004	1.7570
Total	1.0663	0.0632	0.1807	6.2000e-004	0.0524	6.2000e-004	0.0530	0.0140	5.9000e-004	0.0146	1.8914	58.2219	60.1133	0.1191	2.5000e-004	63.1658

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1227	1.2646	0.7360	1.2800e-003		0.0640	0.0640		0.0596	0.0596	0.0000	115.9095	115.9095	0.0319	0.0000	116.7078
Total	0.1227	1.2646	0.7360	1.2800e-003		0.0640	0.0640		0.0596	0.0596	0.0000	115.9095	115.9095	0.0319	0.0000	116.7078

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785
Total	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0463	0.7449	0.8117	1.2800e-003		0.0360	0.0360		0.0352	0.0352	0.0000	115.9093	115.9093	0.0319	0.0000	116.7077
Total	0.0463	0.7449	0.8117	1.2800e-003		0.0360	0.0360		0.0352	0.0352	0.0000	115.9093	115.9093	0.0319	0.0000	116.7077

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3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785
Total	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0720	0.7336	0.4522	8.0000e-004		0.0368	0.0368		0.0342	0.0342	0.0000	70.9840	70.9840	0.0198	0.0000	71.4777
Total	0.0720	0.7336	0.4522	8.0000e-004		0.0368	0.0368		0.0342	0.0342	0.0000	70.9840	70.9840	0.0198	0.0000	71.4777

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570
Total	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.4577	0.5033	8.0000e-004		0.0222	0.0222		0.0217	0.0217	0.0000	70.9839	70.9839	0.0198	0.0000	71.4776
Total	0.0284	0.4577	0.5033	8.0000e-004		0.0222	0.0222		0.0217	0.0217	0.0000	70.9839	70.9839	0.0198	0.0000	71.4776

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570
Total	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4518	0.0000	0.4518	0.2483	0.0000	0.2483	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2303	2.4368	1.5384	2.8000e-003		0.1188	0.1188		0.1096	0.1096	0.0000	247.9256	247.9256	0.0757	0.0000	249.8184
Total	0.2303	2.4368	1.5384	2.8000e-003	0.4518	0.1188	0.5705	0.2483	0.1096	0.3579	0.0000	247.9256	247.9256	0.0757	0.0000	249.8184

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1546	0.0337	4.0000e-004	8.6300e-003	5.8000e-004	9.2100e-003	2.3700e-003	5.5000e-004	2.9200e-003	0.0000	39.3305	39.3305	3.5600e-003	0.0000	39.4196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7300e-003	3.6300e-003	0.0351	1.0000e-004	9.6200e-003	7.0000e-005	9.6900e-003	2.5600e-003	6.0000e-005	2.6200e-003	0.0000	8.9820	8.9820	2.9000e-004	0.0000	8.9892
Total	9.1600e-003	0.1582	0.0688	5.0000e-004	0.0183	6.5000e-004	0.0189	4.9300e-003	6.1000e-004	5.5400e-003	0.0000	48.3125	48.3125	3.8500e-003	0.0000	48.4088

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2033	0.0000	0.2033	0.1117	0.0000	0.1117	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1323	1.8096	1.5840	2.8000e-003		0.0866	0.0866		0.0823	0.0823	0.0000	247.9253	247.9253	0.0757	0.0000	249.8181
Total	0.1323	1.8096	1.5840	2.8000e-003	0.2033	0.0866	0.2899	0.1117	0.0823	0.1940	0.0000	247.9253	247.9253	0.0757	0.0000	249.8181

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1546	0.0337	4.0000e-004	8.6300e-003	5.8000e-004	9.2100e-003	2.3700e-003	5.5000e-004	2.9200e-003	0.0000	39.3305	39.3305	3.5600e-003	0.0000	39.4196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7300e-003	3.6300e-003	0.0351	1.0000e-004	9.6200e-003	7.0000e-005	9.6900e-003	2.5600e-003	6.0000e-005	2.6200e-003	0.0000	8.9820	8.9820	2.9000e-004	0.0000	8.9892
Total	9.1600e-003	0.1582	0.0688	5.0000e-004	0.0183	6.5000e-004	0.0189	4.9300e-003	6.1000e-004	5.5400e-003	0.0000	48.3125	48.3125	3.8500e-003	0.0000	48.4088

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0900	0.7765	0.6221	1.0400e-003		0.0461	0.0461		0.0441	0.0441	0.0000	89.9134	89.9134	0.0172	0.0000	90.3430
Total	0.0900	0.7765	0.6221	1.0400e-003		0.0461	0.0461		0.0441	0.0441	0.0000	89.9134	89.9134	0.0172	0.0000	90.3430

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5600e-003	0.1757	0.0472	3.8000e-004	9.2900e-003	1.2200e-003	0.0105	2.6800e-003	1.1600e-003	3.8500e-003	0.0000	37.1949	37.1949	2.9900e-003	0.0000	37.2695
Worker	0.0141	0.0108	0.1045	3.0000e-004	0.0286	2.1000e-004	0.0288	7.6100e-003	1.9000e-004	7.8000e-003	0.0000	26.7213	26.7213	8.6000e-004	0.0000	26.7428
Total	0.0206	0.1865	0.1517	6.8000e-004	0.0379	1.4300e-003	0.0394	0.0103	1.3500e-003	0.0117	0.0000	63.9162	63.9162	3.8500e-003	0.0000	64.0124

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0523	0.6180	0.6375	1.0400e-003		0.0392	0.0392		0.0380	0.0380	0.0000	89.9133	89.9133	0.0172	0.0000	90.3429
Total	0.0523	0.6180	0.6375	1.0400e-003		0.0392	0.0392		0.0380	0.0380	0.0000	89.9133	89.9133	0.0172	0.0000	90.3429

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5600e-003	0.1757	0.0472	3.8000e-004	9.2900e-003	1.2200e-003	0.0105	2.6800e-003	1.1600e-003	3.8500e-003	0.0000	37.1949	37.1949	2.9900e-003	0.0000	37.2695
Worker	0.0141	0.0108	0.1045	3.0000e-004	0.0286	2.1000e-004	0.0288	7.6100e-003	1.9000e-004	7.8000e-003	0.0000	26.7213	26.7213	8.6000e-004	0.0000	26.7428
Total	0.0206	0.1865	0.1517	6.8000e-004	0.0379	1.4300e-003	0.0394	0.0103	1.3500e-003	0.0117	0.0000	63.9162	63.9162	3.8500e-003	0.0000	64.0124

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3032	2.6583	2.2868	3.9100e-003		0.1504	0.1504		0.1437	0.1437	0.0000	333.0921	333.0921	0.0628	0.0000	334.6617
Total	0.3032	2.6583	2.2868	3.9100e-003		0.1504	0.1504		0.1437	0.1437	0.0000	333.0921	333.0921	0.0628	0.0000	334.6617

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5973	0.1587	1.4200e-003	0.0348	2.9100e-003	0.0377	0.0100	2.7900e-003	0.0128	0.0000	138.2634	138.2634	0.0106	0.0000	138.5283
Worker	0.0493	0.0365	0.3576	1.0700e-003	0.1072	7.7000e-004	0.1079	0.0285	7.1000e-004	0.0292	0.0000	96.8579	96.8579	2.9100e-003	0.0000	96.9306
Total	0.0692	0.6338	0.5162	2.4900e-003	0.1419	3.6800e-003	0.1456	0.0385	3.5000e-003	0.0420	0.0000	235.1213	235.1213	0.0135	0.0000	235.4589

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1814	2.1999	2.3760	3.9100e-003		0.1352	0.1352		0.1311	0.1311	0.0000	333.0917	333.0917	0.0628	0.0000	334.6613
Total	0.1814	2.1999	2.3760	3.9100e-003		0.1352	0.1352		0.1311	0.1311	0.0000	333.0917	333.0917	0.0628	0.0000	334.6613

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5973	0.1587	1.4200e-003	0.0348	2.9100e-003	0.0377	0.0100	2.7900e-003	0.0128	0.0000	138.2634	138.2634	0.0106	0.0000	138.5283
Worker	0.0493	0.0365	0.3576	1.0700e-003	0.1072	7.7000e-004	0.1079	0.0285	7.1000e-004	0.0292	0.0000	96.8579	96.8579	2.9100e-003	0.0000	96.9306
Total	0.0692	0.6338	0.5162	2.4900e-003	0.1419	3.6800e-003	0.1456	0.0385	3.5000e-003	0.0420	0.0000	235.1213	235.1213	0.0135	0.0000	235.4589

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1000	0.8878	0.8245	1.4300e-003		0.0476	0.0476		0.0455	0.0455	0.0000	122.0526	122.0526	0.0226	0.0000	122.6166
Total	0.1000	0.8878	0.8245	1.4300e-003		0.0476	0.0476		0.0455	0.0455	0.0000	122.0526	122.0526	0.0226	0.0000	122.6166

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9400e-003	0.1973	0.0526	5.1000e-004	0.0127	4.2000e-004	0.0132	3.6800e-003	4.0000e-004	4.0800e-003	0.0000	50.1965	50.1965	3.7300e-003	0.0000	50.2896
Worker	0.0170	0.0121	0.1223	3.8000e-004	0.0393	2.8000e-004	0.0395	0.0104	2.6000e-004	0.0107	0.0000	34.2976	34.2976	9.8000e-004	0.0000	34.3222
Total	0.0230	0.2095	0.1749	8.9000e-004	0.0520	7.0000e-004	0.0527	0.0141	6.6000e-004	0.0148	0.0000	84.4941	84.4941	4.7100e-003	0.0000	84.6118

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0616	0.7665	0.8671	1.4300e-003		0.0455	0.0455		0.0443	0.0443	0.0000	122.0524	122.0524	0.0226	0.0000	122.6165
Total	0.0616	0.7665	0.8671	1.4300e-003		0.0455	0.0455		0.0443	0.0443	0.0000	122.0524	122.0524	0.0226	0.0000	122.6165

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9400e-003	0.1973	0.0526	5.1000e-004	0.0127	4.2000e-004	0.0132	3.6800e-003	4.0000e-004	4.0800e-003	0.0000	50.1965	50.1965	3.7300e-003	0.0000	50.2896
Worker	0.0170	0.0121	0.1223	3.8000e-004	0.0393	2.8000e-004	0.0395	0.0104	2.6000e-004	0.0107	0.0000	34.2976	34.2976	9.8000e-004	0.0000	34.3222
Total	0.0230	0.2095	0.1749	8.9000e-004	0.0520	7.0000e-004	0.0527	0.0141	6.6000e-004	0.0148	0.0000	84.4941	84.4941	4.7100e-003	0.0000	84.6118

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0376	0.3667	0.2350	5.2000e-004		0.0172	0.0172		0.0163	0.0163	0.0000	45.1536	45.1536	9.9600e-003	0.0000	45.4027
Total	1.1548	0.3667	0.2350	5.2000e-004		0.0172	0.0172		0.0163	0.0163	0.0000	45.1536	45.1536	9.9600e-003	0.0000	45.4027

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3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010
Total	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.2425	0.2940	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	45.1535	45.1535	9.9600e-003	0.0000	45.4026
Total	1.1290	0.2425	0.2940	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	45.1535	45.1535	9.9600e-003	0.0000	45.4026

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3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010
Total	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0478	0.4743	0.5414	8.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	75.6652	75.6652	0.0238	0.0000	76.2610
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0478	0.4743	0.5414	8.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	75.6652	75.6652	0.0238	0.0000	76.2610

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3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008
Total	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0302	0.4057	0.5687	8.7000e-004		0.0215	0.0215		0.0207	0.0207	0.0000	75.6651	75.6651	0.0238	0.0000	76.2609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0302	0.4057	0.5687	8.7000e-004		0.0215	0.0215		0.0207	0.0207	0.0000	75.6651	75.6651	0.0238	0.0000	76.2609

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3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008
Total	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Unmitigated	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Unmitigated	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Total	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Total	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.4267	0.0102	2.5000e-004	1.7570
Unmitigated	1.4267	0.0102	2.5000e-004	1.7570

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.312 / 0	1.4267	0.0102	2.5000e-004	1.7570
Total		1.4267	0.0102	2.5000e-004	1.7570

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.312 / 0	1.4267	0.0102	2.5000e-004	1.7570
Total		1.4267	0.0102	2.5000e-004	1.7570

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.7924	0.1059	0.0000	4.4406
Unmitigated	1.7924	0.1059	0.0000	4.4406

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	8.83	1.7924	0.1059	0.0000	4.4406
Total		1.7924	0.1059	0.0000	4.4406

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	8.83	1.7924	0.1059	0.0000	4.4406
Total		1.7924	0.1059	0.0000	4.4406

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCWRP Expansion - San Diego County APCD Air District, Summer

NCWRP Expansion
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

NCWRP Expansion - San Diego County APCD Air District, Summer

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

NCWRP Expansion - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

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tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

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tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

NCWRP Expansion - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7871	38.3716	22.8518	0.0403	0.1314	1.9395	2.0709	0.0349	1.8057	1.8406	0.0000	4,015.3224	4,015.3224	1.0716	0.0000	4,042.1131
2019	3.5762	35.8268	22.5551	0.0498	6.2726	1.7958	7.8645	3.3775	1.6705	4.8468	0.0000	4,903.4578	4,903.4578	1.1687	0.0000	4,919.9801
2020	2.8380	25.0550	21.4967	0.0494	1.1087	1.1760	2.2847	0.3002	1.1231	1.4233	0.0000	4,838.5958	4,838.5958	0.6408	0.0000	4,854.6145
2021	22.6020	22.7987	20.9204	0.0490	1.1087	1.0061	2.1148	0.3002	0.9606	1.2608	0.0000	4,799.0525	4,799.0525	0.7047	0.0000	4,814.6799
Maximum	22.6020	38.3716	22.8518	0.0498	6.2726	1.9395	7.8645	3.3775	1.8057	4.8468	0.0000	4,903.4578	4,903.4578	1.1687	0.0000	4,919.9801

NCWRP Expansion - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Total	5.9655	0.8580	2.6526	9.1200e-003	0.7572	8.7600e-003	0.7659	0.2024	8.2300e-003	0.2106		925.0746	925.0746	0.0466	0.0000	926.2394

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Total	5.9655	0.8580	2.6526	9.1200e-003	0.7572	8.7600e-003	0.7659	0.2024	8.2300e-003	0.2106		925.0746	925.0746	0.0466	0.0000	926.2394

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCWRP Expansion - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

NCWRP Expansion - San Diego County APCD Air District, Summer

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787
Total	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787
Total	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0236	0.0000	6.0236	3.3105	0.0000	3.3105			0.0000			0.0000
Off-Road	3.0711	32.4903	20.5118	0.0373		1.5833	1.5833		1.4611	1.4611		3,643.8830	3,643.8830	1.1128		3,671.7017
Total	3.0711	32.4903	20.5118	0.0373	6.0236	1.5833	7.6070	3.3105	1.4611	4.7716		3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0584	2.0205	0.4362	5.3400e-003	0.1175	7.6200e-003	0.1252	0.0322	7.2900e-003	0.0395		582.1746	582.1746	0.0515		583.4626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1212	2.0644	0.9312	6.7400e-003	0.2490	8.5600e-003	0.2575	0.0671	8.1500e-003	0.0752		721.4066	721.4066	0.0560		722.8057

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7106	0.0000	2.7106	1.4897	0.0000	1.4897			0.0000			0.0000
Off-Road	1.7634	24.1281	21.1198	0.0373		1.1540	1.1540		1.0972	1.0972	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017
Total	1.7634	24.1281	21.1198	0.0373	2.7106	1.1540	3.8646	1.4897	1.0972	2.5869	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0584	2.0205	0.4362	5.3400e-003	0.1175	7.6200e-003	0.1252	0.0322	7.2900e-003	0.0395		582.1746	582.1746	0.0515		583.4626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1212	2.0644	0.9312	6.7400e-003	0.2490	8.5600e-003	0.2575	0.0671	8.1500e-003	0.0752		721.4066	721.4066	0.0560		722.8057

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160
Total	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1841	4.9595	1.2804	0.0110	0.2708	0.0345	0.3053	0.0780	0.0330	0.1110		1,184.0665	1,184.0665	0.0914		1,186.3520
Worker	0.4005	0.2795	3.1560	8.9100e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		887.6036	887.6036	0.0283		888.3122
Total	0.5846	5.2390	4.4364	0.0200	1.1087	0.0405	1.1492	0.3002	0.0385	0.3387		2,071.6702	2,071.6702	0.1198		2,074.6642

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160
Total	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1841	4.9595	1.2804	0.0110	0.2708	0.0345	0.3053	0.0780	0.0330	0.1110		1,184.0665	1,184.0665	0.0914		1,186.3520
Worker	0.4005	0.2795	3.1560	8.9100e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		887.6036	887.6036	0.0283		888.3122
Total	0.5846	5.2390	4.4364	0.0200	1.1087	0.0405	1.1492	0.3002	0.0385	0.3387		2,071.6702	2,071.6702	0.1198		2,074.6642

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414
Total	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1495	4.5103	1.1491	0.0110	0.2708	0.0221	0.2929	0.0780	0.0211	0.0991		1,176.160 3	1,176.160 3	0.0868		1,178.329 5
Worker	0.3743	0.2522	2.8913	8.6300e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		859.6020	859.6020	0.0257		860.2437
Total	0.5238	4.7625	4.0403	0.0196	1.1087	0.0280	1.1366	0.3002	0.0265	0.3267		2,035.762 3	2,035.762 3	0.1124		2,038.573 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.833 4	2,802.833 4	0.5283		2,816.041 4
Total	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.833 4	2,802.833 4	0.5283		2,816.041 4

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1495	4.5103	1.1491	0.0110	0.2708	0.0221	0.2929	0.0780	0.0211	0.0991		1,176.1603	1,176.1603	0.0868		1,178.3295
Worker	0.3743	0.2522	2.8913	8.6300e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		859.6020	859.6020	0.0257		860.2437
Total	0.5238	4.7625	4.0403	0.0196	1.1087	0.0280	1.1366	0.3002	0.0265	0.3267		2,035.7623	2,035.7623	0.1124		2,038.5731

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679
Total	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1210	4.0732	1.0380	0.0108	0.2708	8.5500e-003	0.2793	0.0780	8.1800e-003	0.0861		1,165.4078	1,165.4078	0.0833		1,167.4896
Worker	0.3528	0.2292	2.7054	8.3400e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		830.7297	830.7297	0.0237		831.3224
Total	0.4738	4.3024	3.7434	0.0192	1.1087	0.0143	1.1230	0.3002	0.0135	0.3137		1,996.1375	1,996.1375	0.1070		1,998.8120

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679
Total	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1210	4.0732	1.0380	0.0108	0.2708	8.5500e-003	0.2793	0.0780	8.1800e-003	0.0861		1,165.4078	1,165.4078	0.0833		1,167.4896
Worker	0.3528	0.2292	2.7054	8.3400e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		830.7297	830.7297	0.0237		831.3224
Total	0.4738	4.3024	3.7434	0.0192	1.1087	0.0143	1.1230	0.3002	0.0135	0.3137		1,996.1375	1,996.1375	0.1070		1,998.8120

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7021	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740
Total	21.5842	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044
Total	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2201	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740
Total	21.1022	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044
Total	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Summer

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035
Total	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Summer

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035
Total	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Unmitigated	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Unmitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCWRP Expansion - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCWRP Expansion - San Diego County APCD Air District, Winter

NCWRP Expansion
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCWRP Expansion - San Diego County APCD Air District, Winter

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

NCWRP Expansion - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

NCWRP Expansion - San Diego County APCD Air District, Winter

tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

NCWRP Expansion - San Diego County APCD Air District, Winter

tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

NCWRP Expansion - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7959	38.3776	22.8236	0.0402	0.1314	1.9395	2.0709	0.0349	1.8057	1.8406	0.0000	4,006.5389	4,006.5389	1.0714	0.0000	4,033.3235
2019	3.5844	35.8322	22.5279	0.0490	6.2726	1.7958	7.8647	3.3775	1.6705	4.8470	0.0000	4,819.0407	4,819.0407	1.1704	0.0000	4,835.6724
2020	2.8947	25.0823	21.4574	0.0486	1.1087	1.1764	2.2851	0.3002	1.1235	1.4237	0.0000	4,755.6369	4,755.6369	0.6448	0.0000	4,771.7573
2021	22.6187	22.8160	20.8759	0.0482	1.1087	1.0065	2.1151	0.3002	0.9610	1.2612	0.0000	4,718.0308	4,718.0308	0.7042	0.0000	4,733.7548
Maximum	22.6187	38.3776	22.8236	0.0490	6.2726	1.9395	7.8647	3.3775	1.8057	4.8470	0.0000	4,819.0407	4,819.0407	1.1704	0.0000	4,835.6724

NCWRP Expansion - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Total	5.9606	0.8905	2.5593	8.6500e-003	0.7572	8.8000e-003	0.7660	0.2024	8.2600e-003	0.2107		877.7462	877.7462	0.0463	0.0000	878.9028

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Total	5.9606	0.8905	2.5593	8.6500e-003	0.7572	8.8000e-003	0.7660	0.2024	8.2600e-003	0.2107		877.7462	877.7462	0.0463	0.0000	878.9028

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCWRP Expansion - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

NCWRP Expansion - San Diego County APCD Air District, Winter

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891
Total	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891
Total	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0236	0.0000	6.0236	3.3105	0.0000	3.3105			0.0000			0.0000
Off-Road	3.0711	32.4903	20.5118	0.0373		1.5833	1.5833		1.4611	1.4611		3,643.8830	3,643.8830	1.1128		3,671.7017
Total	3.0711	32.4903	20.5118	0.0373	6.0236	1.5833	7.6070	3.3105	1.4611	4.7716		3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0600	2.0412	0.4674	5.2500e-003	0.1175	7.8000e-003	0.1253	0.0322	7.4700e-003	0.0397		572.3780	572.3780	0.0534		573.7126
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1311	2.0905	0.9352	6.5600e-003	0.2490	8.7400e-003	0.2577	0.0671	8.3300e-003	0.0754		703.0842	703.0842	0.0576		704.5243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7106	0.0000	2.7106	1.4897	0.0000	1.4897			0.0000			0.0000
Off-Road	1.7634	24.1281	21.1198	0.0373		1.1540	1.1540		1.0972	1.0972	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017
Total	1.7634	24.1281	21.1198	0.0373	2.7106	1.1540	3.8646	1.4897	1.0972	2.5869	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0600	2.0412	0.4674	5.2500e-003	0.1175	7.8000e-003	0.1253	0.0322	7.4700e-003	0.0397		572.3780	572.3780	0.0534		573.7126
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1311	2.0905	0.9352	6.5600e-003	0.2490	8.7400e-003	0.2577	0.0671	8.3300e-003	0.0754		703.0842	703.0842	0.0576		704.5243

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160
Total	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.1920	4.9635	1.4196	0.0108	0.2708	0.0351	0.3059	0.0780	0.0336	0.1115		1,154.0010	1,154.0010	0.0973			1,156.4323
Worker	0.4530	0.3139	2.9824	8.3700e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		833.2520	833.2520	0.0269			833.9242
Total	0.6450	5.2774	4.4020	0.0191	1.1087	0.0411	1.1498	0.3002	0.0391	0.3393		1,987.2530	1,987.2530	0.1241			1,990.3564

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411			2,845.3160
Total	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411			2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1920	4.9635	1.4196	0.0108	0.2708	0.0351	0.3059	0.0780	0.0336	0.1115		1,154.0010	1,154.0010	0.0973		1,156.4323
Worker	0.4530	0.3139	2.9824	8.3700e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		833.2520	833.2520	0.0269		833.9242
Total	0.6450	5.2774	4.4020	0.0191	1.1087	0.0411	1.1498	0.3002	0.0391	0.3393		1,987.2530	1,987.2530	0.1241		1,990.3564

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414
Total	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1566	4.5067	1.2752	0.0107	0.2708	0.0225	0.2933	0.0780	0.0215	0.0995		1,145.8489	1,145.8489	0.0922		1,148.1539
Worker	0.4239	0.2832	2.7259	8.1000e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		806.9546	806.9546	0.0243		807.5620
Total	0.5805	4.7898	4.0011	0.0188	1.1087	0.0284	1.1371	0.3002	0.0269	0.3271		1,952.8035	1,952.8035	0.1165		1,955.7159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.8334	2,802.8334	0.5283		2,816.0414
Total	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.8334	2,802.8334	0.5283		2,816.0414

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1566	4.5067	1.2752	0.0107	0.2708	0.0225	0.2933	0.0780	0.0215	0.0995		1,145.8489	1,145.8489	0.0922		1,148.1539
Worker	0.4239	0.2832	2.7259	8.1000e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		806.9546	806.9546	0.0243		807.5620
Total	0.5805	4.7898	4.0011	0.0188	1.1087	0.0284	1.1371	0.3002	0.0269	0.3271		1,952.8035	1,952.8035	0.1165		1,955.7159

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679
Total	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1275	4.0623	1.1558	0.0106	0.2708	8.9000e-003	0.2797	0.0780	8.5100e-003	0.0865		1,135.2772	1,135.2772	0.0884		1,137.4882
Worker	0.4001	0.2573	2.5431	7.8300e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		779.8385	779.8385	0.0224		780.3986
Total	0.5276	4.3196	3.6989	0.0184	1.1087	0.0147	1.1234	0.3002	0.0138	0.3140		1,915.1157	1,915.1157	0.1108		1,917.8869

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679
Total	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1275	4.0623	1.1558	0.0106	0.2708	8.9000e-003	0.2797	0.0780	8.5100e-003	0.0865		1,135.2772	1,135.2772	0.0884		1,137.4882
Worker	0.4001	0.2573	2.5431	7.8300e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		779.8385	779.8385	0.0224		780.3986
Total	0.5276	4.3196	3.6989	0.0184	1.1087	0.0147	1.1234	0.3002	0.0138	0.3140		1,915.1157	1,915.1157	0.1108		1,917.8869

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7021	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740
Total	21.5842	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2201	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740
Total	21.1022	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Winter

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155
Total	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Winter

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155
Total	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Unmitigated	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCWRP Expansion - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCWRP Expansion - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Unmitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

NCWRP Expansion - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCWRP Expansion - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Annual

North City Pump Station
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

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tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-21-2019	8-20-2019	1.0694	0.7455
2	8-21-2019	11-20-2019	0.6779	0.4609
3	11-21-2019	2-20-2020	0.6472	0.4605
4	2-21-2020	5-20-2020	0.6084	0.4496
5	5-21-2020	8-20-2020	0.3769	0.2823
		Highest	1.0694	0.7455

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0240	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0224	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0443	0.1065	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.66	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.05	0.00	0.00	0.02

3.0 Construction Detail

Construction Phase

North City Pump Station - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0225	0.2363	0.1233	2.1000e-004		0.0121	0.0121		0.0112	0.0112	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186
Total	0.0225	0.2363	0.1233	2.1000e-004	0.0903	0.0121	0.1025	0.0497	0.0112	0.0608	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186

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3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2300e-003	0.1051	0.1325	2.1000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186
Total	5.2300e-003	0.1051	0.1325	2.1000e-004	0.0407	5.0100e-003	0.0457	0.0223	5.0100e-003	0.0274	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186

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3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0846	0.7137	0.6565	1.1600e-003		0.0389	0.0389		0.0366	0.0366	0.0000	101.4245	101.4245	0.0274	0.0000	102.1090
Total	0.0846	0.7137	0.6565	1.1600e-003		0.0389	0.0389		0.0366	0.0366	0.0000	101.4245	101.4245	0.0274	0.0000	102.1090

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3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0299	0.5952	0.7586	1.1600e-003		0.0332	0.0332		0.0332	0.0332	0.0000	101.4244	101.4244	0.0274	0.0000	102.1089
Total	0.0299	0.5952	0.7586	1.1600e-003		0.0332	0.0332		0.0332	0.0332	0.0000	101.4244	101.4244	0.0274	0.0000	102.1089

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3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1025	0.8665	0.7052	1.1000e-003		0.0486	0.0486		0.0455	0.0455	0.0000	95.2979	95.2979	0.0275	0.0000	95.9843
Total	0.1025	0.8665	0.7052	1.1000e-003		0.0486	0.0486		0.0455	0.0455	0.0000	95.2979	95.2979	0.0275	0.0000	95.9843

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0121	3.2400e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5505	2.5505	2.0000e-004	0.0000	2.5556
Worker	4.9200e-003	3.7800e-003	0.0365	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	9.3412	9.3412	3.0000e-004	0.0000	9.3488
Total	5.3700e-003	0.0158	0.0398	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8400e-003	1.5000e-004	2.9900e-003	0.0000	11.8918	11.8918	5.0000e-004	0.0000	11.9044

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0313	0.6208	0.7327	1.1000e-003		0.0377	0.0377		0.0377	0.0377	0.0000	95.2978	95.2978	0.0275	0.0000	95.9842
Total	0.0313	0.6208	0.7327	1.1000e-003		0.0377	0.0377		0.0377	0.0377	0.0000	95.2978	95.2978	0.0275	0.0000	95.9842

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0121	3.2400e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5505	2.5505	2.0000e-004	0.0000	2.5556
Worker	4.9200e-003	3.7800e-003	0.0365	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	9.3412	9.3412	3.0000e-004	0.0000	9.3488
Total	5.3700e-003	0.0158	0.0398	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8400e-003	1.5000e-004	2.9900e-003	0.0000	11.8918	11.8918	5.0000e-004	0.0000	11.9044

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1288	1.1124	0.9629	1.5400e-003		0.0592	0.0592		0.0554	0.0554	0.0000	130.6728	130.6728	0.0378	0.0000	131.6186
Total	0.1288	1.1124	0.9629	1.5400e-003		0.0592	0.0592		0.0554	0.0554	0.0000	130.6728	130.6728	0.0378	0.0000	131.6186

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0153	4.0600e-003	4.0000e-005	8.9000e-004	7.0000e-005	9.6000e-004	2.6000e-004	7.0000e-005	3.3000e-004	0.0000	3.5357	3.5357	2.7000e-004	0.0000	3.5425
Worker	6.4200e-003	4.7500e-003	0.0466	1.4000e-004	0.0140	1.0000e-004	0.0141	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6273	12.6273	3.8000e-004	0.0000	12.6368
Total	6.9300e-003	0.0200	0.0507	1.8000e-004	0.0149	1.7000e-004	0.0150	3.9700e-003	1.6000e-004	4.1300e-003	0.0000	16.1631	16.1631	6.5000e-004	0.0000	16.1793

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0437	0.8665	1.0227	1.5400e-003		0.0526	0.0526		0.0526	0.0526	0.0000	130.6726	130.6726	0.0378	0.0000	131.6184
Total	0.0437	0.8665	1.0227	1.5400e-003		0.0526	0.0526		0.0526	0.0526	0.0000	130.6726	130.6726	0.0378	0.0000	131.6184

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0153	4.0600e-003	4.0000e-005	8.9000e-004	7.0000e-005	9.6000e-004	2.6000e-004	7.0000e-005	3.3000e-004	0.0000	3.5357	3.5357	2.7000e-004	0.0000	3.5425
Worker	6.4200e-003	4.7500e-003	0.0466	1.4000e-004	0.0140	1.0000e-004	0.0141	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6273	12.6273	3.8000e-004	0.0000	12.6368
Total	6.9300e-003	0.0200	0.0507	1.8000e-004	0.0149	1.7000e-004	0.0150	3.9700e-003	1.6000e-004	4.1300e-003	0.0000	16.1631	16.1631	6.5000e-004	0.0000	16.1793

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.7900e-003	0.0533	0.0485	9.0000e-005		2.8500e-003	2.8500e-003		2.6700e-003	2.6700e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0112
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7900e-003	0.0533	0.0485	9.0000e-005		2.8500e-003	2.8500e-003		2.6700e-003	2.6700e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0112

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3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264
Total	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1500e-003	0.0452	0.0589	9.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0111
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1500e-003	0.0452	0.0589	9.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0111

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264
Total	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Unmitigated	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

North City Pump Station - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0199					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Total	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

North City Pump Station - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

North City Pump Station - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

North City Pump Station - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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North City Pump Station - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Summer

North City Pump Station
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

North City Pump Station - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

North City Pump Station - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

North City Pump Station - San Diego County APCD Air District, Summer

tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

North City Pump Station - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1317	1.0000e-005	5.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000	0.0000	1.2800e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1229	0.0000	3.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000	0.0000	6.8000e-004

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.70	100.00	41.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	45.83	0.00	0.00	46.88

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

North City Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

North City Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9955	31.5054	16.4368	0.0284		1.6189	1.6189		1.4894	1.4894		2,817.0663	2,817.0663	0.8913		2,839.3485
Total	2.9955	31.5054	16.4368	0.0284	12.0442	1.6189	13.6631	6.6205	1.4894	8.1098		2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	0.6972	14.0109	17.6633	0.0284		0.6684	0.6684		0.6684	0.6684	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485
Total	0.6972	14.0109	17.6633	0.0284	5.4199	0.6684	6.0882	2.9792	0.6684	3.6476	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621
Total	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1113	0.3192	0.8685	2.8200e-003	0.2271	3.2500e-003	0.2304	0.0606	3.0500e-003	0.0636		285.4552	285.4552	0.0118		285.7501

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1113	0.3192	0.8685	2.8200e-003	0.2271	3.2500e-003	0.2304	0.0606	3.0500e-003	0.0636		285.4552	285.4552	0.0118		285.7501

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425
Total	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0954	0.0643	0.7370	2.2000e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		219.1142	219.1142	6.5400e-003		219.2778
Total	0.1029	0.2898	0.7944	2.7500e-003	0.2271	2.6000e-003	0.2297	0.0606	2.4400e-003	0.0630		277.9223	277.9223	0.0109		278.1943

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0954	0.0643	0.7370	2.2000e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		219.1142	219.1142	6.5400e-003		219.2778
Total	0.1029	0.2898	0.7944	2.7500e-003	0.2271	2.6000e-003	0.2297	0.0606	2.4400e-003	0.0630		277.9223	277.9223	0.0109		278.1943

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136

North City Pump Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135

North City Pump Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

North City Pump Station - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

North City Pump Station - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Unmitigated	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1177					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Total	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

North City Pump Station - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Total	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North City Pump Station - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Winter

North City Pump Station
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

North City Pump Station - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

North City Pump Station - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

North City Pump Station - San Diego County APCD Air District, Winter

tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

North City Pump Station - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1317	1.0000e-005	5.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000	0.0000	1.2800e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1229	0.0000	3.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000	0.0000	6.8000e-004

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.70	100.00	41.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	45.83	0.00	0.00	46.88

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

North City Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

North City Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9955	31.5054	16.4368	0.0284		1.6189	1.6189		1.4894	1.4894		2,817.0663	2,817.0663	0.8913		2,839.3485
Total	2.9955	31.5054	16.4368	0.0284	12.0442	1.6189	13.6631	6.6205	1.4894	8.1098		2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	0.6972	14.0109	17.6633	0.0284		0.6684	0.6684		0.6684	0.6684	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485
Total	0.6972	14.0109	17.6633	0.0284	5.4199	0.6684	6.0882	2.9792	0.6684	3.6476	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621
Total	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1251	0.3282	0.8312	2.6700e-003	0.2271	3.2800e-003	0.2304	0.0606	3.0800e-003	0.0636		270.0976	270.0976	0.0117		270.3905

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1251	0.3282	0.8312	2.6700e-003	0.2271	3.2800e-003	0.2304	0.0606	3.0800e-003	0.0636		270.0976	270.0976	0.0117		270.3905

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425
Total	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.1081	0.0722	0.6948	2.0600e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		205.6943	205.6943	6.1900e-003		205.8491
Total	0.1159	0.2975	0.7586	2.5900e-003	0.2271	2.6200e-003	0.2297	0.0606	2.4600e-003	0.0630		262.9868	262.9868	0.0108		263.2568

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.1081	0.0722	0.6948	2.0600e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		205.6943	205.6943	6.1900e-003		205.8491
Total	0.1159	0.2975	0.7586	2.5900e-003	0.2271	2.6200e-003	0.2297	0.0606	2.4600e-003	0.0630		262.9868	262.9868	0.0108		263.2568

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136

North City Pump Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135

North City Pump Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

North City Pump Station - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

North City Pump Station - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Unmitigated	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1177					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Total	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

North City Pump Station - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Total	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North City Pump Station - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pure Water Dechlorination Facility - San Diego County APCD Air District, Annual

Pure Water Dechlorination Facility
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.81	1000sqft	0.04	1,812.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading -

Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating -

Vehicle Trips - No mobile trips.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided data.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	90.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	1/6/2019	8/2/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	3/29/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	8/13/2019

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tblConstructionPhase	PhaseStartDate	1/7/2019	4/1/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	8/3/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	2.24	0.29
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	100.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00

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tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	418,562.50	10,400.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	0.2527	0.1735
2	4-7-2019	7-6-2019	0.4138	0.2717
3	7-7-2019	9-30-2019	0.1484	0.0963
		Highest	0.4138	0.2717

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	7.9200e-003	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0443	0.1065	3.8200e-003	1.0000e-005	0.2044

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	7.9200e-003	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0443	0.1065	3.8200e-003	1.0000e-005	0.2044

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/1/2019	8/2/2019	5	90	
2	Grading	Grading	1/7/2019	3/29/2019	5	60	
3	Paving	Paving	8/3/2019	8/13/2019	5	7	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Cement and Mortar Mixers	1	8.00	9	0.56
	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
	Pumps	1	8.00	84	0.74
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
	Welders	1	8.00	46	0.45
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	100.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.4419	0.3394	5.1000e-004		0.0272	0.0272		0.0251	0.0251	0.0000	46.0352	46.0352	0.0146	0.0000	46.3993
Total	0.0431	0.4419	0.3394	5.1000e-004		0.0272	0.0272		0.0251	0.0251	0.0000	46.0352	46.0352	0.0146	0.0000	46.3993

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3.2 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1100e-003	0.0565	0.0152	1.2000e-004	2.9900e-003	3.9000e-004	3.3800e-003	8.6000e-004	3.7000e-004	1.2400e-003	0.0000	11.9555	11.9555	9.6000e-004	0.0000	11.9795
Worker	0.0177	0.0136	0.1317	3.7000e-004	0.0361	2.6000e-004	0.0364	9.5900e-003	2.4000e-004	9.8300e-003	0.0000	33.6823	33.6823	1.0800e-003	0.0000	33.7094
Total	0.0199	0.0701	0.1468	4.9000e-004	0.0391	6.5000e-004	0.0397	0.0105	6.1000e-004	0.0111	0.0000	45.6379	45.6379	2.0400e-003	0.0000	45.6889

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.2758	0.3583	5.1000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	46.0352	46.0352	0.0146	0.0000	46.3993
Total	0.0126	0.2758	0.3583	5.1000e-004		0.0174	0.0174		0.0174	0.0174	0.0000	46.0352	46.0352	0.0146	0.0000	46.3993

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3.2 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1100e-003	0.0565	0.0152	1.2000e-004	2.9900e-003	3.9000e-004	3.3800e-003	8.6000e-004	3.7000e-004	1.2400e-003	0.0000	11.9555	11.9555	9.6000e-004	0.0000	11.9795
Worker	0.0177	0.0136	0.1317	3.7000e-004	0.0361	2.6000e-004	0.0364	9.5900e-003	2.4000e-004	9.8300e-003	0.0000	33.6823	33.6823	1.0800e-003	0.0000	33.7094
Total	0.0199	0.0701	0.1468	4.9000e-004	0.0391	6.5000e-004	0.0397	0.0105	6.1000e-004	0.0111	0.0000	45.6379	45.6379	2.0400e-003	0.0000	45.6889

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0225	0.2047	0.2245	3.9000e-004		9.4600e-003	9.4600e-003		8.8400e-003	8.8400e-003	0.0000	33.1540	33.1540	9.4000e-003	0.0000	33.3890
Total	0.0225	0.2047	0.2245	3.9000e-004		9.4600e-003	9.4600e-003		8.8400e-003	8.8400e-003	0.0000	33.1540	33.1540	9.4000e-003	0.0000	33.3890

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4500e-003	0.0140	4.0000e-005	3.8500e-003	3.0000e-005	3.8800e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5928	3.5928	1.2000e-004	0.0000	3.5957
Total	1.8900e-003	1.4500e-003	0.0140	4.0000e-005	3.8500e-003	3.0000e-005	3.8800e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5928	3.5928	1.2000e-004	0.0000	3.5957

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6600e-003	0.1481	0.2363	3.9000e-004		7.1500e-003	7.1500e-003		7.1500e-003	7.1500e-003	0.0000	33.1540	33.1540	9.4000e-003	0.0000	33.3889
Total	7.6600e-003	0.1481	0.2363	3.9000e-004		7.1500e-003	7.1500e-003		7.1500e-003	7.1500e-003	0.0000	33.1540	33.1540	9.4000e-003	0.0000	33.3889

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4500e-003	0.0140	4.0000e-005	3.8500e-003	3.0000e-005	3.8800e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5928	3.5928	1.2000e-004	0.0000	3.5957
Total	1.8900e-003	1.4500e-003	0.0140	4.0000e-005	3.8500e-003	3.0000e-005	3.8800e-003	1.0200e-003	3.0000e-005	1.0500e-003	0.0000	3.5928	3.5928	1.2000e-004	0.0000	3.5957

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0600e-003	0.0204	0.0177	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.4961	2.4961	7.5000e-004	0.0000	2.5148
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.0600e-003	0.0204	0.0177	3.0000e-005		1.1100e-003	1.1100e-003		1.0300e-003	1.0300e-003	0.0000	2.4961	2.4961	7.5000e-004	0.0000	2.5148

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3.4 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.6400e-003	0.0000	4.5000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4192	0.4192	1.0000e-005	0.0000	0.4195
Total	2.2000e-004	1.7000e-004	1.6400e-003	0.0000	4.5000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4192	0.4192	1.0000e-005	0.0000	0.4195

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.3000e-004	0.0130	0.0194	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.4961	2.4961	7.5000e-004	0.0000	2.5148
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.3000e-004	0.0130	0.0194	3.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.4961	2.4961	7.5000e-004	0.0000	2.5148

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3.4 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	1.7000e-004	1.6400e-003	0.0000	4.5000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4192	0.4192	1.0000e-005	0.0000	0.4195
Total	2.2000e-004	1.7000e-004	1.6400e-003	0.0000	4.5000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4192	0.4192	1.0000e-005	0.0000	0.4195

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.0800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	8.4000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.0800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	7.9200e-003	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

Pure Water Dechlorination Facility
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.81	1000sqft	0.04	1,812.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading -

Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating -

Vehicle Trips - No mobile trips.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided data.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	90.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	1/6/2019	8/2/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	3/29/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	8/13/2019

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

tblConstructionPhase	PhaseStartDate	1/7/2019	4/1/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	8/3/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	2.24	0.29
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	100.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	418,562.50	10,400.00

2.0 Emissions Summary

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0434	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000	0.0000	4.2000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0434	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000	0.0000	4.2000e-004

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/1/2019	8/2/2019	5	90	
2	Grading	Grading	1/7/2019	3/29/2019	5	60	
3	Paving	Paving	8/3/2019	8/13/2019	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Cement and Mortar Mixers	1	8.00	9	0.56
	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
	Pumps	1	8.00	84	0.74
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
	Welders	1	8.00	46	0.45
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	100.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0460	1.2399	0.3201	2.7600e-003	0.0677	8.6300e-003	0.0763	0.0195	8.2500e-003	0.0277		296.0166	296.0166	0.0229		296.5880
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4387	1.5139	3.4142	0.0115	0.8892	0.0145	0.9037	0.2374	0.0137	0.2510		1,166.2163	1,166.2163	0.0506		1,167.4823

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.2 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0460	1.2399	0.3201	2.7600e-003	0.0677	8.6300e-003	0.0763	0.0195	8.2500e-003	0.0277		296.0166	296.0166	0.0229		296.5880
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4387	1.5139	3.4142	0.0115	0.8892	0.0145	0.9037	0.2374	0.0137	0.2510		1,166.2163	1,166.2163	0.0506		1,167.4823

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2554	4.9380	7.8752	0.0129		0.2384	0.2384		0.2384	0.2384	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.2554	4.9380	7.8752	0.0129		0.2384	0.2384		0.2384	0.2384	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5878	5.8310	5.0598	8.0700e-003		0.3183	0.3183		0.2942	0.2942		786.1223	786.1223	0.2360		792.0218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5878	5.8310	5.0598	8.0700e-003		0.3183	0.3183		0.2942	0.2942		786.1223	786.1223	0.2360		792.0218

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

3.4 Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1799	3.7032	5.5468	8.0700e-003		0.2108	0.2108		0.2108	0.2108	0.0000	786.1223	786.1223	0.2360		792.0218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1799	3.7032	5.5468	8.0700e-003		0.2108	0.2108		0.2108	0.2108	0.0000	786.1223	786.1223	0.2360		792.0218

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

4.0 Operational Detail - Mobile

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Unmitigated	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0388					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Total	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0388					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Total	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Pure Water Dechlorination Facility - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

Pure Water Dechlorination Facility
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.81	1000sqft	0.04	1,812.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading -

Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating -

Vehicle Trips - No mobile trips.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided data.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	90.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	1/6/2019	8/2/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	3/29/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	8/13/2019

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

tblConstructionPhase	PhaseStartDate	1/7/2019	4/1/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	8/3/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	2.24	0.29
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	1.00	100.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	418,562.50	10,400.00

2.0 Emissions Summary

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0434	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000	0.0000	4.2000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0434	0.0000	1.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000	0.0000	4.2000e-004

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/1/2019	8/2/2019	5	90	
2	Grading	Grading	1/7/2019	3/29/2019	5	60	
3	Paving	Paving	8/3/2019	8/13/2019	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
	Cement and Mortar Mixers	1	8.00	9	0.56
	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
	Pumps	1	8.00	84	0.74
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
	Welders	1	8.00	46	0.45
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	5	100.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.2 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.9576	9.8207	7.5432	0.0114		0.6054	0.6054		0.5569	0.5569		1,127.6696	1,127.6696	0.3568		1,136.5892

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0480	1.2409	0.3549	2.6900e-003	0.0677	8.7800e-003	0.0765	0.0195	8.4000e-003	0.0279		288.5003	288.5003	0.0243		289.1081
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4921	1.5486	3.2788	0.0109	0.8892	0.0146	0.9038	0.2374	0.0138	0.2512		1,105.4140	1,105.4140	0.0507		1,106.6808

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.2 Building Construction - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892
Total	0.2793	6.1296	7.9624	0.0114		0.3855	0.3855		0.3855	0.3855	0.0000	1,127.6696	1,127.6696	0.3568		1,136.5892

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0480	1.2409	0.3549	2.6900e-003	0.0677	8.7800e-003	0.0765	0.0195	8.4000e-003	0.0279		288.5003	288.5003	0.0243		289.1081
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4921	1.5486	3.2788	0.0109	0.8892	0.0146	0.9038	0.2374	0.0138	0.2512		1,105.4140	1,105.4140	0.0507		1,106.6808

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2554	4.9380	7.8752	0.0129		0.2384	0.2384		0.2384	0.2384	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.2554	4.9380	7.8752	0.0129		0.2384	0.2384		0.2384	0.2384	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.4 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5878	5.8310	5.0598	8.0700e-003		0.3183	0.3183		0.2942	0.2942		786.1223	786.1223	0.2360		792.0218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5878	5.8310	5.0598	8.0700e-003		0.3183	0.3183		0.2942	0.2942		786.1223	786.1223	0.2360		792.0218

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

3.4 Paving - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1799	3.7032	5.5468	8.0700e-003		0.2108	0.2108		0.2108	0.2108	0.0000	786.1223	786.1223	0.2360		792.0218
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.1799	3.7032	5.5468	8.0700e-003		0.2108	0.2108		0.2108	0.2108	0.0000	786.1223	786.1223	0.2360		792.0218

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

4.0 Operational Detail - Mobile

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Unmitigated	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0388					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Total	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0388					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004
Total	0.0434	0.0000	1.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.0000e-004	4.0000e-004	0.0000		4.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Pure Water Dechlorination Facility - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Renewable Energy Facility - San Diego County APCD Air District, Annual

Renewable Energy Facility
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

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tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2020	8-31-2020	0.4558	0.2896
2	9-1-2020	11-30-2020	0.4510	0.2866
3	12-1-2020	2-28-2021	0.4174	0.2825
4	3-1-2021	5-31-2021	0.3917	0.2733
5	6-1-2021	8-31-2021	0.0126	0.0083
		Highest	0.4558	0.2896

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0116	107.5013	107.5129	5.5200e-003	9.2000e-004	107.9259
Total	0.0663	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	107.5016	107.5132	5.5200e-003	9.2000e-004	107.9262

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0116	20.4457	20.4573	2.0100e-003	2.0000e-004	20.5667
Total	0.0614	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	20.4459	20.4575	2.0100e-003	2.0000e-004	20.5669

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.48	0.00	43.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.98	80.97	63.59	78.26	80.94

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Renewable Energy Facility - San Diego County APCD Air District, Annual

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4900e-003	0.0000	1.4900e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	9.5800e-003	0.0942	0.0619	1.0000e-004	1.4900e-003	5.1000e-003	6.5900e-003	2.3000e-004	4.7700e-003	5.0000e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9900e-003	4.6000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5399	0.5399	5.0000e-005	0.0000	0.5411
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	2.4000e-004	2.1300e-003	1.8000e-003	1.0000e-005	5.2000e-004	1.0000e-005	5.3000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.9023	0.9023	6.0000e-005	0.0000	0.9038

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7000e-004	0.0000	6.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	2.4300e-003	0.0518	0.0654	1.0000e-004	6.7000e-004	2.9800e-003	3.6500e-003	1.0000e-004	2.9800e-003	3.0800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9900e-003	4.6000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5399	0.5399	5.0000e-005	0.0000	0.5411
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	2.4000e-004	2.1300e-003	1.8000e-003	1.0000e-005	5.2000e-004	1.0000e-005	5.3000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.9023	0.9023	6.0000e-005	0.0000	0.9038

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3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0257	0.0000	0.0257	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	9.5800e-003	0.0942	0.0619	1.0000e-004	0.0257	5.1000e-003	0.0308	0.0134	4.7700e-003	0.0182	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

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3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0116	0.0000	0.0116	6.0400e-003	0.0000	6.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	2.4300e-003	0.0518	0.0654	1.0000e-004	0.0116	2.9800e-003	0.0146	6.0400e-003	2.9800e-003	9.0200e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

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3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1155	1.2136	0.8990	1.5000e-003		0.0678	0.0678		0.0624	0.0624	0.0000	131.4607	131.4607	0.0425	0.0000	132.5236
Total	0.1155	1.2136	0.8990	1.5000e-003		0.0678	0.0678		0.0624	0.0624	0.0000	131.4607	131.4607	0.0425	0.0000	132.5236

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5200e-003	0.0454	0.0121	1.1000e-004	2.6400e-003	2.2000e-004	2.8600e-003	7.6000e-004	2.1000e-004	9.7000e-004	0.0000	10.5017	10.5017	8.0000e-004	0.0000	10.5218
Worker	2.9300e-003	2.1700e-003	0.0213	6.0000e-005	6.3800e-003	5.0000e-005	6.4300e-003	1.7000e-003	4.0000e-005	1.7400e-003	0.0000	5.7700	5.7700	1.7000e-004	0.0000	5.7743
Total	4.4500e-003	0.0475	0.0334	1.7000e-004	9.0200e-003	2.7000e-004	9.2900e-003	2.4600e-003	2.5000e-004	2.7100e-003	0.0000	16.2717	16.2717	9.7000e-004	0.0000	16.2962

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3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.7891	1.0029	1.5000e-003		0.0465	0.0465		0.0465	0.0465	0.0000	131.4606	131.4606	0.0425	0.0000	132.5235
Total	0.0367	0.7891	1.0029	1.5000e-003		0.0465	0.0465		0.0465	0.0465	0.0000	131.4606	131.4606	0.0425	0.0000	132.5235

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5200e-003	0.0454	0.0121	1.1000e-004	2.6400e-003	2.2000e-004	2.8600e-003	7.6000e-004	2.1000e-004	9.7000e-004	0.0000	10.5017	10.5017	8.0000e-004	0.0000	10.5218
Worker	2.9300e-003	2.1700e-003	0.0213	6.0000e-005	6.3800e-003	5.0000e-005	6.4300e-003	1.7000e-003	4.0000e-005	1.7400e-003	0.0000	5.7700	5.7700	1.7000e-004	0.0000	5.7743
Total	4.4500e-003	0.0475	0.0334	1.7000e-004	9.0200e-003	2.7000e-004	9.2900e-003	2.4600e-003	2.5000e-004	2.7100e-003	0.0000	16.2717	16.2717	9.7000e-004	0.0000	16.2962

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3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0528	0.5555	0.4464	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	66.7310	66.7310	0.0216	0.0000	67.2706
Total	0.0528	0.5555	0.4464	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	66.7310	66.7310	0.0216	0.0000	67.2706

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0208	5.5400e-003	5.0000e-005	1.3400e-003	4.0000e-005	1.3800e-003	3.9000e-004	4.0000e-005	4.3000e-004	0.0000	5.2811	5.2811	3.9000e-004	0.0000	5.2909
Worker	1.4000e-003	1.0000e-003	0.0101	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8301	2.8301	8.0000e-005	0.0000	2.8321
Total	2.0200e-003	0.0218	0.0156	8.0000e-005	4.5800e-003	6.0000e-005	4.6400e-003	1.2500e-003	6.0000e-005	1.3100e-003	0.0000	8.1112	8.1112	4.7000e-004	0.0000	8.1230

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3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.4005	0.5090	7.6000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	66.7309	66.7309	0.0216	0.0000	67.2705
Total	0.0186	0.4005	0.5090	7.6000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	66.7309	66.7309	0.0216	0.0000	67.2705

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0208	5.5400e-003	5.0000e-005	1.3400e-003	4.0000e-005	1.3800e-003	3.9000e-004	4.0000e-005	4.3000e-004	0.0000	5.2811	5.2811	3.9000e-004	0.0000	5.2909
Worker	1.4000e-003	1.0000e-003	0.0101	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8301	2.8301	8.0000e-005	0.0000	2.8321
Total	2.0200e-003	0.0218	0.0156	8.0000e-005	4.5800e-003	6.0000e-005	4.6400e-003	1.2500e-003	6.0000e-005	1.3100e-003	0.0000	8.1112	8.1112	4.7000e-004	0.0000	8.1230

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3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2900e-003	0.0394	0.0414	7.0000e-005		2.0600e-003	2.0600e-003		1.9200e-003	1.9200e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2900e-003	0.0394	0.0414	7.0000e-005		2.0600e-003	2.0600e-003		1.9200e-003	1.9200e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309
Total	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309

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3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2800e-003	0.0272	0.0394	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2800e-003	0.0272	0.0394	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309
Total	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Annual

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Unmitigated	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004

Renewable Energy Facility - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004
Total	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Total	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Annual

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.4573	2.0100e-003	2.0000e-004	20.5667
Unmitigated	107.5129	5.5200e-003	9.2000e-004	107.9259

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0365 / 29.565	107.5129	5.5200e-003	9.2000e-004	107.9259
Total		107.5129	5.5200e-003	9.2000e-004	107.9259

Renewable Energy Facility - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0365 / 5.58834	20.4573	2.0100e-003	2.0000e-004	20.5667
Total		20.4573	2.0100e-003	2.0000e-004	20.5667

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Renewable Energy Facility - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Renewable Energy Facility - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Renewable Energy Facility - San Diego County APCD Air District, Summer

Renewable Energy Facility
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Renewable Energy Facility - San Diego County APCD Air District, Summer

Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Renewable Energy Facility - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

Renewable Energy Facility - San Diego County APCD Air District, Summer

tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

Renewable Energy Facility - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3634	2.0000e-005	1.7400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005	0.0000	3.9600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3362	1.0000e-005	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000	0.0000	2.1100e-003

Renewable Energy Facility - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.50	50.00	41.95	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.24	46.24	100.00	0.00	46.72

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Renewable Energy Facility - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2990	0.0000	0.2990	0.0453	0.0000	0.0453			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	0.2990	1.0194	1.3184	0.0453	0.9537	0.9990		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0111	0.3906	0.0887	1.1000e-003	0.0245	1.2500e-003	0.0257	6.7000e-003	1.1900e-003	7.9000e-003		119.8857	119.8857	0.0106		120.1497
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0478	0.4153	0.3721	1.9500e-003	0.1066	1.8300e-003	0.1084	0.0285	1.7200e-003	0.0302		204.1604	204.1604	0.0131		204.4874

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1346	0.0000	0.1346	0.0204	0.0000	0.0204			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	0.1346	0.5966	0.7312	0.0204	0.5966	0.6170	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0111	0.3906	0.0887	1.1000e-003	0.0245	1.2500e-003	0.0257	6.7000e-003	1.1900e-003	7.9000e-003		119.8857	119.8857	0.0106		120.1497
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0478	0.4153	0.3721	1.9500e-003	0.1066	1.8300e-003	0.1084	0.0285	1.7200e-003	0.0302		204.1604	204.1604	0.0131		204.4874

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1464	0.0000	5.1464	2.6837	0.0000	2.6837			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	5.1464	1.0194	6.1658	2.6837	0.9537	3.6374		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3159	0.0000	2.3159	1.2077	0.0000	1.2077			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	2.3159	0.5966	2.9125	1.2077	0.5966	1.8043	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640
Total	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	0.0443	0.4708	0.3417	1.7800e-003	0.0928	2.6700e-003	0.0955	0.0252	2.5300e-003	0.0278		185.0358	185.0358	0.0107		185.3030

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	0.0443	0.4708	0.3417	1.7800e-003	0.0928	2.6700e-003	0.0955	0.0252	2.5300e-003	0.0278		185.0358	185.0358	0.0107		185.3030

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779
Total	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4073	0.1038	1.0800e-003	0.0271	8.6000e-004	0.0279	7.8000e-003	8.2000e-004	8.6100e-003		116.5408	116.5408	8.3300e-003		116.7490
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		65.1553	65.1553	1.8600e-003		65.2018
Total	0.0398	0.4253	0.3160	1.7300e-003	0.0928	1.3100e-003	0.0941	0.0252	1.2400e-003	0.0265		181.6961	181.6961	0.0102		181.9507

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4073	0.1038	1.0800e-003	0.0271	8.6000e-004	0.0279	7.8000e-003	8.2000e-004	8.6100e-003		116.5408	116.5408	8.3300e-003		116.7490
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		65.1553	65.1553	1.8600e-003		65.2018
Total	0.0398	0.4253	0.3160	1.7300e-003	0.0928	1.3100e-003	0.0941	0.0252	1.2400e-003	0.0265		181.6961	181.6961	0.0102		181.9507

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

4.0 Operational Detail - Mobile

Renewable Energy Facility - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Renewable Energy Facility - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Renewable Energy Facility - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Unmitigated	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Renewable Energy Facility - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Total	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3361					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Total	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Renewable Energy Facility - San Diego County APCD Air District, Winter

Renewable Energy Facility
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Renewable Energy Facility - San Diego County APCD Air District, Winter

Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Renewable Energy Facility - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

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tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

Renewable Energy Facility - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3634	2.0000e-005	1.7400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005	0.0000	3.9600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3362	1.0000e-005	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000	0.0000	2.1100e-003

Renewable Energy Facility - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.50	50.00	41.95	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.24	46.24	100.00	0.00	46.72

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Renewable Energy Facility - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2990	0.0000	0.2990	0.0453	0.0000	0.0453			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	0.2990	1.0194	1.3184	0.0453	0.9537	0.9990		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0114	0.3943	0.0945	1.0800e-003	0.0245	1.2700e-003	0.0257	6.7000e-003	1.2200e-003	7.9200e-003		117.8290	117.8290	0.0109		118.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0529	0.4221	0.3618	1.8700e-003	0.1066	1.8500e-003	0.1085	0.0285	1.7500e-003	0.0302		196.9422	196.9422	0.0133		197.2748

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1346	0.0000	0.1346	0.0204	0.0000	0.0204			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	0.1346	0.5966	0.7312	0.0204	0.5966	0.6170	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0114	0.3943	0.0945	1.0800e-003	0.0245	1.2700e-003	0.0257	6.7000e-003	1.2200e-003	7.9200e-003		117.8290	117.8290	0.0109		118.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0529	0.4221	0.3618	1.8700e-003	0.1066	1.8500e-003	0.1085	0.0285	1.7500e-003	0.0302		196.9422	196.9422	0.0133		197.2748

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1464	0.0000	5.1464	2.6837	0.0000	2.6837			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	5.1464	1.0194	6.1658	2.6837	0.9537	3.6374		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3159	0.0000	2.3159	1.2077	0.0000	1.2077			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	2.3159	0.5966	2.9125	1.2077	0.5966	1.8043	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640
Total	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	0.0489	0.4729	0.3413	1.7100e-003	0.0928	2.7100e-003	0.0955	0.0252	2.5700e-003	0.0278		177.8755	177.8755	0.0111		178.1536

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	0.0489	0.4729	0.3413	1.7100e-003	0.0928	2.7100e-003	0.0955	0.0252	2.5700e-003	0.0278		177.8755	177.8755	0.0111		178.1536

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779
Total	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4062	0.1156	1.0600e-003	0.0271	8.9000e-004	0.0280	7.8000e-003	8.5000e-004	8.6500e-003		113.5277	113.5277	8.8400e-003		113.7488
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		61.1638	61.1638	1.7600e-003		61.2077
Total	0.0441	0.4264	0.3150	1.6700e-003	0.0928	1.3400e-003	0.0941	0.0252	1.2700e-003	0.0265		174.6915	174.6915	0.0106		174.9566

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4062	0.1156	1.0600e-003	0.0271	8.9000e-004	0.0280	7.8000e-003	8.5000e-004	8.6500e-003		113.5277	113.5277	8.8400e-003		113.7488
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		61.1638	61.1638	1.7600e-003		61.2077
Total	0.0441	0.4264	0.3150	1.6700e-003	0.0928	1.3400e-003	0.0941	0.0252	1.2700e-003	0.0265		174.6915	174.6915	0.0106		174.9566

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

4.0 Operational Detail - Mobile

Renewable Energy Facility - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Renewable Energy Facility - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Renewable Energy Facility - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Unmitigated	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Renewable Energy Facility - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Total	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3361					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Total	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Stationary CH₄ Emissions from Anaerobic Digesters

$$(P \times \text{Digester Gas} \times F_{\text{CH}_4} \times \rho(\text{CH}_4) \times (1-\text{DE}) \times 0.0283 \times 365.25 \times 10^{-6}) \times \text{GWP}$$

		Facility	MGD*	P	MT CO ₂ E
Wastewater per capita	80 gal/day/capita				
Digester Gas [ft ³ /person/day]	1	Rincon	30	375,000	416.98
F CH ₄	0.65				
ρ(CH ₄)	662				
DE	99%				
m ³ /ft ₃	0.0283	Total	30	375,000	417
day/yr	365.25				
MT/g	1.0E-06				
GWP	25				

*peak day net increase

Source: CARB, California Climate Action Registry, ICLEI - Local Governments for Sustainability, 2010.
Local Government Operations Protocol – For the Quantification and Reporting of Greenhouse Gas Emissions Inventories. Version 1.1. May 2010

Process N₂O Emissions from WWTP with Nitrification/Denitrification (MT CO₂E)

$$((P_{\text{total}} \times F_{\text{ind-com}}) \times \text{EF nit/denit} \times 10^{-6}) \times \text{GWP}$$

Wastewater per capita	80 gal/day/capita	Facility	MGD*	P	MT CO ₂ E
F _{ind-com}	1.25	Rincon		21	262,500
EF nit/denit	7.0				684.47
MT/g	1.0E-06				
GWP	298				
		Total	21	262,500	684
			*peak day net increase		

Source: CARB, California Climate Action Registry, ICLEI - Local Governments for Sustainability, 2010. *Local Government Operations Protocol – For the Quantification and Reporting of Greenhouse Gas Emissions Inventories*. Version 1.1. May 2010

Discharge N₂O Emissions (MT CO₂E)

$$(N \text{ Load} \times EF \text{ effluent} \times 365.25 \times 10^{-3} \times 44/28) \times GWP$$

Flow to Treatment Plant	30 MGD
NO ₂ concentration	0.5 mg/L
N Load (kg N/day)	57
EF [kg N ₂ O-N/kg sewage-N produced]	0.005
day/year	365.25
MT/kg	1.0E-03
molecular weight ratio of N ₂ O to N ₂	1.57
GWP	298

Emissions (MT CO₂E) 48.53

Source: CARB, California Climate Action Registry, ICLEI - Local Governments for Sustainability, 2010. *Local Government Operations Protocol – For the Quantification and Reporting of Greenhouse Gas Emissions Inventories* . Version 1.1. May 2010

Compressor Station Emergency Generator

Emergency Generator Emission Estimates

Operational Equipment - Project Name	OFFROAD Model Category	Engine Tier	Quantity	Engine Rating (hp)	Engine Rating (kW)	Load Factor	Operation (hr/day)	Operation (day/yr)	Emission Factors								Emissions										
									VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2E
									(g/bhp-hr)								(lb/day)										
Emergency Generator	Generator Sets	4	1	3,353	2,500	0.74	1.0	50	0.1399	0.5	2.6	0.0055	0.02	0.02	568.299	0.018	0.008069	0.77	2.74	14.22	0.03	0.11	0.11	3,108.63	0.10	0.04	-
											(ton/year)							(MT/yr)									
											0.02	0.07	0.36	0.00	0.00	0.00	70.50	0.00	0.00	70.86							

Emission Factors

Equipment Type	VOC ¹	NOx ¹	CO ²	SOx ²	PM10 ²	PM2.5 ¹	CO2 ³	CH4 ³	N2O ⁴
Generator Sets	0.1399	0.5	2.6	0.0055	0.02	0.02	568.299	0.018	0.008069

Notes: ¹ EPA Tier 4 for 1200+ hp engines

² EPA AP-42, Table 3.4-1, Calculated Value based on Ultra Low Sulfur Diesel

³ Emission factors from CARB OFFROAD 2011, for generators over 1,000 hp

⁴ N2O emission factor based on ratio of CH4 to N2O in diesel fuel from The Climate Registry's 2017 Default Emission Factors

APPENDIX B

San Vicente Reservoir Alternative CalEEMod Outputs and Estimated Emissions

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

Morena Pipeline-Open Trench
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

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tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2020	12-31-2020	0.6593	0.3958
2	1-1-2021	3-31-2021	0.5820	0.3851
3	4-1-2021	6-30-2021	0.4714	0.3938
4	7-1-2021	9-30-2021	0.4700	0.3938
		Highest	0.6593	0.3958

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4629	1.0000e-005	1.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4629	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.4629	1.0000e-005	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.01	0.00	42.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.23	46.23	100.00	0.00	46.90

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2920	2.9365	1.9703	3.1400e-003		0.1650	0.1650		0.1518	0.1518	0.0000	276.2689	276.2689	0.0894	0.0000	278.5027
Total	0.2920	2.9365	1.9703	3.1400e-003		0.1650	0.1650		0.1518	0.1518	0.0000	276.2689	276.2689	0.0894	0.0000	278.5027

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3.2 Trenching - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.1100e-003	1.6300e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9281	1.9281	1.7000e-004	0.0000	1.9325
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0900e-003	7.1200e-003	0.0680	2.2000e-004	0.0219	1.5000e-004	0.0220	5.8100e-003	1.4000e-004	5.9500e-003	0.0000	19.5885	19.5885	5.7000e-004	0.0000	19.6027
Total	9.2900e-003	0.0142	0.0697	2.4000e-004	0.0223	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003	0.0000	21.5166	21.5166	7.4000e-004	0.0000	21.5352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0770	1.6001	2.1165	3.1400e-003		0.0874	0.0874		0.0874	0.0874	0.0000	276.2686	276.2686	0.0894	0.0000	278.5024
Total	0.0770	1.6001	2.1165	3.1400e-003		0.0874	0.0874		0.0874	0.0874	0.0000	276.2686	276.2686	0.0894	0.0000	278.5024

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3.2 Trenching - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.1100e-003	1.6300e-003	2.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.2000e-004	2.0000e-005	1.4000e-004	0.0000	1.9281	1.9281	1.7000e-004	0.0000	1.9325
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0900e-003	7.1200e-003	0.0680	2.2000e-004	0.0219	1.5000e-004	0.0220	5.8100e-003	1.4000e-004	5.9500e-003	0.0000	19.5885	19.5885	5.7000e-004	0.0000	19.6027
Total	9.2900e-003	0.0142	0.0697	2.4000e-004	0.0223	1.7000e-004	0.0225	5.9300e-003	1.6000e-004	6.0900e-003	0.0000	21.5166	21.5166	7.4000e-004	0.0000	21.5352

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0565	0.6156	0.3903	7.3000e-004		0.0316	0.0316		0.0291	0.0291	0.0000	63.9849	63.9849	0.0207	0.0000	64.5022
Total	0.0565	0.6156	0.3903	7.3000e-004		0.0316	0.0316		0.0291	0.0291	0.0000	63.9849	63.9849	0.0207	0.0000	64.5022

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	7.6300e-003	2.0200e-003	2.0000e-005	4.2000e-004	4.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.6000e-004	0.0000	1.7053	1.7053	1.3000e-004	0.0000	1.7087
Worker	0.0116	9.0900e-003	0.0868	2.8000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.6000e-003	0.0000	25.0018	25.0018	7.3000e-004	0.0000	25.0200
Total	0.0119	0.0167	0.0889	3.0000e-004	0.0284	2.3000e-004	0.0286	7.5400e-003	2.1000e-004	7.7600e-003	0.0000	26.7071	26.7071	8.6000e-004	0.0000	26.7287

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0179	0.3735	0.4603	7.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	63.9848	63.9848	0.0207	0.0000	64.5021
Total	0.0179	0.3735	0.4603	7.3000e-004		0.0200	0.0200		0.0200	0.0200	0.0000	63.9848	63.9848	0.0207	0.0000	64.5021

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	7.6300e-003	2.0200e-003	2.0000e-005	4.2000e-004	4.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.6000e-004	0.0000	1.7053	1.7053	1.3000e-004	0.0000	1.7087
Worker	0.0116	9.0900e-003	0.0868	2.8000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.8000e-004	7.6000e-003	0.0000	25.0018	25.0018	7.3000e-004	0.0000	25.0200
Total	0.0119	0.0167	0.0889	3.0000e-004	0.0284	2.3000e-004	0.0286	7.5400e-003	2.1000e-004	7.7600e-003	0.0000	26.7071	26.7071	8.6000e-004	0.0000	26.7287

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0474	0.5151	0.3517	6.8000e-004		0.0255	0.0255		0.0235	0.0235	0.0000	59.4193	59.4193	0.0192	0.0000	59.8997
Total	0.0474	0.5151	0.3517	6.8000e-004		0.0255	0.0255		0.0235	0.0235	0.0000	59.4193	59.4193	0.0192	0.0000	59.8997

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3.3 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.4100e-003	1.7000e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.3000e-004	0.0000	1.5689	1.5689	1.2000e-004	0.0000	1.5719
Worker	0.0102	7.6700e-003	0.0754	2.5000e-004	0.0259	1.8000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.4355	22.4355	6.2000e-004	0.0000	22.4511
Total	0.0104	0.0141	0.0771	2.7000e-004	0.0263	1.9000e-004	0.0265	7.0000e-003	1.7000e-004	7.1800e-003	0.0000	24.0044	24.0044	7.4000e-004	0.0000	24.0230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0166	0.3468	0.4274	6.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	59.4192	59.4192	0.0192	0.0000	59.8996
Total	0.0166	0.3468	0.4274	6.8000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	59.4192	59.4192	0.0192	0.0000	59.8996

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3.3 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.4100e-003	1.7000e-003	2.0000e-005	3.9000e-004	1.0000e-005	4.0000e-004	1.1000e-004	1.0000e-005	1.3000e-004	0.0000	1.5689	1.5689	1.2000e-004	0.0000	1.5719
Worker	0.0102	7.6700e-003	0.0754	2.5000e-004	0.0259	1.8000e-004	0.0261	6.8900e-003	1.6000e-004	7.0500e-003	0.0000	22.4355	22.4355	6.2000e-004	0.0000	22.4511
Total	0.0104	0.0141	0.0771	2.7000e-004	0.0263	1.9000e-004	0.0265	7.0000e-003	1.7000e-004	7.1800e-003	0.0000	24.0044	24.0044	7.4000e-004	0.0000	24.0230

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0841	0.8656	0.9818	1.5300e-003		0.0454	0.0454		0.0418	0.0418	0.0000	134.1573	134.1573	0.0434	0.0000	135.2421
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0841	0.8656	0.9818	1.5300e-003		0.0454	0.0454		0.0418	0.0418	0.0000	134.1573	134.1573	0.0434	0.0000	135.2421

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3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709
Total	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0376	0.7568	1.1588	1.5300e-003		0.0408	0.0408		0.0408	0.0408	0.0000	134.1572	134.1572	0.0434	0.0000	135.2419
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0376	0.7568	1.1588	1.5300e-003		0.0408	0.0408		0.0408	0.0408	0.0000	134.1572	134.1572	0.0434	0.0000	135.2419

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3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709
Total	5.2500e-003	3.9600e-003	0.0389	1.3000e-004	0.0134	9.0000e-005	0.0135	3.5500e-003	8.0000e-005	3.6300e-003	0.0000	11.5629	11.5629	3.2000e-004	0.0000	11.5709

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4629	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Unmitigated	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4628					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003
Total	0.4629	1.0000e-005	1.0900e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1200e-003	2.1200e-003	1.0000e-005	0.0000	2.2600e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4628					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003
Total	0.4628	1.0000e-005	6.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1400e-003	1.1400e-003	0.0000	0.0000	1.2000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Morena Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5370	1.1000e-004	0.0122	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005	0.0000	0.0277

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5364	6.0000e-005	7.0400e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005	0.0000	0.0147

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.45	42.06	0.00	0.00	50.00	50.00	0.00	50.00	50.00	0.00	46.09	46.09	57.14	0.00	46.85

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9300e-003	0.1033	0.0235	2.9000e-004	6.4700e-003	3.3000e-004	6.8000e-003	1.7700e-003	3.2000e-004	2.0900e-003		31.7158	31.7158	2.7900e-003		31.7857
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1352	0.1988	1.1077	3.6800e-003	0.3386	2.5700e-003	0.3411	0.0898	2.3900e-003	0.0922		369.2262	369.2262	0.0126		369.5415

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.9300e-003	0.1033	0.0235	2.9000e-004	6.4700e-003	3.3000e-004	6.8000e-003	1.7700e-003	3.2000e-004	2.0900e-003		31.7158	31.7158	2.7900e-003		31.7857
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1322	0.0955	1.0843	3.3900e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		337.5104	337.5104	9.8200e-003		337.7559
Total	0.1352	0.1988	1.1077	3.6800e-003	0.3386	2.5700e-003	0.3411	0.0898	2.3900e-003	0.0922		369.2262	369.2262	0.0126		369.5415

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3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.3255	0.2351	2.6690	8.3400e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		830.7949	830.7949	0.0242		831.3991
Total	0.3325	0.4509	2.7237	8.8500e-003	0.8297	6.5200e-003	0.8362	0.2203	6.0400e-003	0.2264		885.1383	885.1383	0.0283		885.8457

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.3255	0.2351	2.6690	8.3400e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		830.7949	830.7949	0.0242		831.3991
Total	0.3325	0.4509	2.7237	8.8500e-003	0.8297	6.5200e-003	0.8362	0.2203	6.0400e-003	0.2264		885.1383	885.1383	0.0283		885.8457

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344
Total	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.3073	0.2139	2.5009	8.0500e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		802.8712	802.8712	0.0223		803.4298
Total	0.3131	0.4095	2.5503	8.5500e-003	0.8297	5.8200e-003	0.8356	0.2203	5.3700e-003	0.2257		856.7175	856.7175	0.0263		857.3750

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.7200e-003	0.1956	0.0494	5.0000e-004	0.0123	3.9000e-004	0.0126	3.5300e-003	3.7000e-004	3.9000e-003		53.8463	53.8463	3.9600e-003		53.9452
Worker	0.3073	0.2139	2.5009	8.0500e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		802.8712	802.8712	0.0223		803.4298
Total	0.3131	0.4095	2.5503	8.5500e-003	0.8297	5.8200e-003	0.8356	0.2203	5.3700e-003	0.2257		856.7175	856.7175	0.0263		857.3750

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Unmitigated	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Total	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Total	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Morena Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	118.50	1000sqft	2.72	118,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.
 Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	59250	0
tblAreaCoating	Area_Nonresidential_Interior	177750	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	135.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblConstructionPhase	NumDays	10.00	134.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	146.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	19.00	2.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	50.00	64.00

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	27,403,125.00	0.00

2.0 Emissions Summary

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5370	1.1000e-004	0.0122	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005	0.0000	0.0277

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.5364	6.0000e-005	7.0400e-003	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005	0.0000	0.0147

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.03	45.45	42.06	0.00	0.00	50.00	50.00	0.00	50.00	50.00	0.00	46.09	46.09	57.14	0.00	46.85

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	3/20/2020	9/24/2020	5	135	
2	Building Construction	Building Construction	9/25/2020	4/1/2021	5	135	Pipeline installation and backfill.
3	Paving	Paving	4/1/2021	10/5/2021	5	134	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	50.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	64.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988
Total	4.3264	43.5035	29.1902	0.0466		2.4447	2.4447		2.2491	2.2491		4,511.6201	4,511.6201	1.4592		4,548.0988

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1043	0.0250	2.8000e-004	6.4700e-003	3.4000e-004	6.8100e-003	1.7700e-003	3.2000e-004	2.1000e-003		31.1717	31.1717	2.8900e-003		31.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1564	0.2115	1.0263	3.4600e-003	0.3386	2.5800e-003	0.3412	0.0898	2.3900e-003	0.0922		347.8751	347.8751	0.0121		348.1775

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,511.6201	4,511.6201	1.4592		4,548.0988

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.0100e-003	0.1043	0.0250	2.8000e-004	6.4700e-003	3.4000e-004	6.8100e-003	1.7700e-003	3.2000e-004	2.1000e-003		31.1717	31.1717	2.8900e-003		31.2439
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1533	0.1072	1.0013	3.1800e-003	0.3321	2.2400e-003	0.3343	0.0881	2.0700e-003	0.0901		316.7034	316.7034	9.2100e-003		316.9335
Total	0.1564	0.2115	1.0263	3.4600e-003	0.3386	2.5800e-003	0.3412	0.0898	2.3900e-003	0.0922		347.8751	347.8751	0.0121		348.1775

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717
Total	1.6138	17.5884	11.1507	0.0208		0.9041	0.9041		0.8318	0.8318		2,015.1779	2,015.1779	0.6518		2,031.4717

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.3775	0.2639	2.4648	7.8200e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		779.5776	779.5776	0.0227		780.1441
Total	0.3848	0.4791	2.5258	8.3100e-003	0.8297	6.5500e-003	0.8363	0.2203	6.0600e-003	0.2264		832.4054	832.4054	0.0271		833.0819

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.1779	2,015.1779	0.6518		2,031.4717

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.3775	0.2639	2.4648	7.8200e-003	0.8175	5.5200e-003	0.8230	0.2168	5.0800e-003	0.2219		779.5776	779.5776	0.0227		780.1441
Total	0.3848	0.4791	2.5258	8.3100e-003	0.8297	6.5500e-003	0.8363	0.2203	6.0600e-003	0.2264		832.4054	832.4054	0.0271		833.0819

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344
Total	1.4590	15.8485	10.8219	0.0208		0.7847	0.7847		0.7219	0.7219		2,015.3393	2,015.3393	0.6518		2,031.6344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.3569	0.2400	2.3036	7.5600e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		753.3624	753.3624	0.0209		753.8854
Total	0.3630	0.4348	2.3589	8.0500e-003	0.8297	5.8400e-003	0.8356	0.2203	5.3900e-003	0.2257		805.7022	805.7022	0.0251		806.3306

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344
Total	0.5108	10.6713	13.1511	0.0208		0.5716	0.5716		0.5716	0.5716	0.0000	2,015.3393	2,015.3393	0.6518		2,031.6344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.3569	0.2400	2.3036	7.5600e-003	0.8175	5.4300e-003	0.8229	0.2168	5.0000e-003	0.2218		753.3624	753.3624	0.0209		753.8854
Total	0.3630	0.4348	2.3589	8.0500e-003	0.8297	5.8400e-003	0.8356	0.2203	5.3900e-003	0.2257		805.7022	805.7022	0.0251		806.3306

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

4.0 Operational Detail - Mobile

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Unmitigated	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1300e-003	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277
Total	2.5370	1.1000e-004	0.0122	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0259	0.0259	7.0000e-005		0.0277

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5359					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8000e-004	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147
Total	2.5364	6.0000e-005	7.0400e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0140	0.0140	3.0000e-005		0.0147

7.0 Water Detail

Morena Pipeline-Open Trench - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

Landfill Gas Pipeline-Trenchless
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	NumDays	1.00	120.00
tblConstructionPhase	NumDays	1.00	120.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

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tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	21.00	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0135	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0125	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.49	0.00	33.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	57.14

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	3/2/2020	3/27/2020	5	20	
2	Portal Excavation	Site Preparation	3/30/2020	9/11/2020	5	120	
3	Site Restoration	Site Preparation	9/14/2020	2/26/2021	5	120	
4	Tunnel Excavation	Trenching	3/1/2021	10/5/2021	5	157	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Site Preparation at Portal Sites - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.2018	0.1155	2.5000e-004		7.9400e-003	7.9400e-003		7.3000e-003	7.3000e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445
Total	0.0168	0.2018	0.1155	2.5000e-004	0.0000	7.9400e-003	7.9400e-003	0.0000	7.3000e-003	7.3000e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936
Total	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936

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3.2 Site Preparation at Portal Sites - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.7800e-003	0.1199	0.1395	2.5000e-004		5.1100e-003	5.1100e-003		5.1400e-003	5.1400e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445
Total	5.7800e-003	0.1199	0.1395	2.5000e-004	0.0000	5.1100e-003	5.1100e-003	0.0000	5.1400e-003	5.1400e-003	0.0000	21.8677	21.8677	7.0700e-003	0.0000	22.0445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936
Total	4.1000e-004	3.2000e-004	3.1000e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0000e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8929	0.8929	3.0000e-005	0.0000	0.8936

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3.3 Portal Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2590	0.0000	0.2590	0.1423	0.0000	0.1423	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1504	1.4067	1.0001	1.6300e-003		0.0798	0.0798		0.0746	0.0746	0.0000	142.5861	142.5861	0.0371	0.0000	143.5134
Total	0.1504	1.4067	1.0001	1.6300e-003	0.2590	0.0798	0.3388	0.1423	0.0746	0.2169	0.0000	142.5861	142.5861	0.0371	0.0000	143.5134

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229
Total	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229

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3.3 Portal Excavation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1165	0.0000	0.1165	0.0641	0.0000	0.0641	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.7938	1.0607	1.6300e-003		0.0448	0.0448		0.0450	0.0450	0.0000	142.5860	142.5860	0.0371	0.0000	143.5132
Total	0.0361	0.7938	1.0607	1.6300e-003	0.1165	0.0448	0.1614	0.0641	0.0450	0.1090	0.0000	142.5860	142.5860	0.0371	0.0000	143.5132

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229
Total	4.9700e-003	3.8900e-003	0.0372	1.2000e-004	0.0120	8.0000e-005	0.0121	3.1800e-003	8.0000e-005	3.2600e-003	0.0000	10.7151	10.7151	3.1000e-004	0.0000	10.7229

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3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.2800e-003	0.0832	0.0901	1.2000e-004		5.2600e-003	5.2600e-003		4.8400e-003	4.8400e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648
Total	8.2800e-003	0.0832	0.0901	1.2000e-004	0.0000	5.2600e-003	5.2600e-003	0.0000	4.8400e-003	4.8400e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648
Total	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648

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3.4 Site Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6800e-003	0.0649	0.0931	1.2000e-004		4.6900e-003	4.6900e-003		4.7900e-003	4.7900e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648
Total	1.6800e-003	0.0649	0.0931	1.2000e-004	0.0000	4.6900e-003	4.6900e-003	0.0000	4.7900e-003	4.7900e-003	0.0000	10.7777	10.7777	3.4900e-003	0.0000	10.8648

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648
Total	8.2000e-004	6.4000e-004	6.1300e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9800e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7635	1.7635	5.0000e-005	0.0000	1.7648

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3.4 Site Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8400e-003	0.0389	0.0463	6.0000e-005		2.2900e-003	2.2900e-003		2.1100e-003	2.1100e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412
Total	3.8400e-003	0.0389	0.0463	6.0000e-005	0.0000	2.2900e-003	2.2900e-003	0.0000	2.1100e-003	2.1100e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851
Total	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851

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3.4 Site Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.9000e-004	0.0347	0.0484	6.0000e-005		2.5400e-003	2.5400e-003		2.5900e-003	2.5900e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412
Total	9.9000e-004	0.0347	0.0484	6.0000e-005	0.0000	2.5400e-003	2.5400e-003	0.0000	2.5900e-003	2.5900e-003	0.0000	5.5959	5.5959	1.8100e-003	0.0000	5.6412

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851
Total	4.0000e-004	3.0000e-004	2.9700e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8845	0.8845	2.0000e-005	0.0000	0.8851

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3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1851	1.7292	1.2965	2.1300e-003		0.0951	0.0951		0.0888	0.0888	0.0000	186.5733	186.5733	0.0483	0.0000	187.7804
Total	0.1851	1.7292	1.2965	2.1300e-003		0.0951	0.0951		0.0888	0.0888	0.0000	186.5733	186.5733	0.0483	0.0000	187.7804

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0155	4.1100e-003	4.0000e-005	9.4000e-004	3.0000e-005	9.7000e-004	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	3.7896	3.7896	2.9000e-004	0.0000	3.7968
Worker	9.9900e-003	7.5300e-003	0.0740	2.4000e-004	0.0255	1.7000e-004	0.0256	6.7600e-003	1.6000e-004	6.9200e-003	0.0000	22.0148	22.0148	6.1000e-004	0.0000	22.0301
Total	0.0105	0.0230	0.0781	2.8000e-004	0.0264	2.0000e-004	0.0266	7.0300e-003	1.9000e-004	7.2200e-003	0.0000	25.8044	25.8044	9.0000e-004	0.0000	25.8269

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3.5 Tunnel Excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0477	1.0426	1.3881	2.1300e-003		0.0591	0.0591		0.0593	0.0593	0.0000	186.5731	186.5731	0.0483	0.0000	187.7802
Total	0.0477	1.0426	1.3881	2.1300e-003		0.0591	0.0591		0.0593	0.0593	0.0000	186.5731	186.5731	0.0483	0.0000	187.7802

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0155	4.1100e-003	4.0000e-005	9.4000e-004	3.0000e-005	9.7000e-004	2.7000e-004	3.0000e-005	3.0000e-004	0.0000	3.7896	3.7896	2.9000e-004	0.0000	3.7968
Worker	9.9900e-003	7.5300e-003	0.0740	2.4000e-004	0.0255	1.7000e-004	0.0256	6.7600e-003	1.6000e-004	6.9200e-003	0.0000	22.0148	22.0148	6.1000e-004	0.0000	22.0301
Total	0.0105	0.0230	0.0781	2.8000e-004	0.0264	2.0000e-004	0.0266	7.0300e-003	1.9000e-004	7.2200e-003	0.0000	25.8044	25.8044	9.0000e-004	0.0000	25.8269

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005
Total	0.0135	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0000	7.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005
Total	0.0125	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

tblProjectCharacteristics

ProjectName	Location	Sc	EMFAC_IC	WindSpeed	Precipitation	ClimateZone	Urbanization	Operational	UtilityCompany
Landfill Ga	AD		SDAPCD	2.6	40	13 Rural		2021	San Diego

tblProjectCharacteristics

CO2Intens	CH4Intensi	N2OIntens	TotalPopul	TotalLotAc	UsingHisto	ConstructionPhaseStartDate
720.49	0.029	0.006	0	0.08	0	2020/10/01

tblPollutants

PollutantSeq	PollutantFid	PollutantName
1	Reactive O	ROG
1	Nitrogen O	NOX
1	Carbon Mo	CO
1	Sulfur Diox	SO2
1	Particulate	PM10
1	Particulate	PM2_5
1	Fugitive PM	PM10_FUG
1	Fugitive PM	PM25_FUG
1	Biogenic C	CO2_BIO
1	Non-Bioge	CO2_NBIO
1	Carbon Dic	CO2
1	Methane (C	CH4
1	Nitrous Oxi	N2O
1	CO2 Equiv	CO2E

tblLandUse

LandUseTy	LandUseSi	LandUseUi	LandUseSi	LotAcreage	LandUseSr	Population	BuildingSp	GreenSpace
Industrial	General Lic	3.45	1000sqft	0.08	3452.97	0	3452.97	0

tblLandUse

RecSwimmingAreaAllowEdit
0

tblConstructionPhase

PhaseNum	PhaseNam	PhaseType	PhaseStart	PhaseEnd	NumDaysV	NumDays	PhaseDescription
1	Site Prepar	Site Prepar	2020/03/02	2020/03/27	5	20	
2	Portal Excav	Site Prepar	2020/03/30	2020/09/11	5	120	
3	Site Restor	Site Prepar	2020/09/14	2021/02/26	5	120	
4	Tunnel Exc	Trenching	2021/03/01	2021/10/05	5	157	

tblOffRoadEquipment

PhaseNam	OffRoadEq	OffRoadEq	UsageHou	HorsePow	LoadFactor
Site Prepar	Graders	1	8	187	0.41
Site Prepar	Scrapers	1	8	367	0.48
Site Prepar	Tractors/Lc	1	8	97	0.37
Portal Exc	Crushing/P	1	8	85	0.78
Portal Exc	Excavators	1	8	158	0.38
Portal Exc	Rubber Tir	1	8	247	0.4
Portal Exc	Tractors/Lc	1	8	97	0.37
Portal Exc	Trenchers	1	8	78	0.5
Site Restor	Tractors/Lc	1	8	97	0.37
Tunnel Exc	Crushing/P	1	8	85	0.78
Tunnel Exc	Excavators	1	8	158	0.38
Tunnel Exc	Rubber Tir	1	8	247	0.4
Tunnel Exc	Tractors/Lc	1	8	97	0.37
Tunnel Exc	Trenchers	1	8	78	0.5

tblTripsAndVMT

PhaseNam	WorkerTrip	VendorTrip	HaulingTriç	WorkerTrip	VendorTrip	HaulingTriç	WorkerVeh	VendorVeh
Site Prepar	8	0	0	16.8	6.6	20	LD_Mix	HDT_Mix
Portal Exca	16	0	0	16.8	6.6	20	LD_Mix	HDT_Mix
Site Restor	4	0	0	16.8	6.6	20	LD_Mix	HDT_Mix
Tunnel Exc	26	2	0	16.8	6.6	20	LD_Mix	HDT_Mix

HaulingVehicleClass
HHDT
HHDT
HHDT
HHDT

tblOnRoadDust

PhaseNam	WorkerPer	VendorPer	HaulingPer	RoadSiltLo	MaterialSilt	MaterialMo	AverageVe	MeanVehic
Site Prepar	100	100	100	0.1	8.5	0.5	2.4	40
Portal Exca	100	100	100	0.1	8.5	0.5	2.4	40
Site Restor	100	100	100	0.1	8.5	0.5	2.4	40
Tunnel Exc	100	100	100	0.1	8.5	0.5	2.4	40

tblOnRoadDust

leSpeed

PhaseNam Demolition: DemolitionUnitAmount

tblGrading

PhaseNam	MaterialIm	MaterialEx	GradingSiz	ImportExp	MeanVehic	AcresOfGr	MaterialMo	MaterialMo
Site Prepar	0	0	Cubic Yard	0	7.1	0	7.9	12
Portal Exca	0	0		0	7.1	0	7.9	12
Site Restor	0	0		0	7.1		7.9	12

MaterialSiltContent
6.9
6.9
6.9

tblArchitecturalCoating

PhaseNam Architectur: Architectur: EF_Reside ConstArea, EF_Reside ConstArea, EF_Nonres ConstArea,

tblArchitecturalCoating

EF_Nonres ConstArea_EF_Parking ConstArea_Parking

tblPaving

ParkingLotAcreage

tblVehicleTrips

VehicleTrip	VehicleTrip	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL	
General Lic	1000sqft	0	0	0	0	0	0	0	6.6

tblVehicleTrips

CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP
14.7	6.6	92	5	3	0	0	0	28

tblVehicleTrips

CW_TTP	CNW_TTP
59	13

tblVehicleEF

Season	EmissionType	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD
A	FleetMix	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.01594
A	CH4_IDLE	0	0	0	0	0.005189	0.003792	0.01669
A	CH4_RUNI	0.007064	0.01258	0.006205	0.011082	0.020369	0.008775	0.006283
A	CH4_STRE	0.008916	0.017469	0.007506	0.016259	0.018927	0.008191	0.056693
A	CO_IDLE	0	0	0	0	0.142709	0.124765	0.361548
A	CO_RUNE	0.64148	1.394338	0.731488	1.180012	1.204059	0.626052	0.446093
A	CO_STRE	1.613343	3.35832	1.587141	2.858958	2.506544	1.224843	6.596747
A	CO2_NBIC	0	0	0	0	9.281637	14.18079	146.0958
A	CO2_NBIC	269.9395	340.0823	380.3914	506.2837	687.4357	720.4456	1207.329
A	CO2_NBIC	58.49629	73.28469	82.33237	108.3367	29.29151	24.86012	57.75631
A	NOX_IDLE	0	0	0	0	0.091325	0.111512	0.622795
A	NOX_RUN	0.070233	0.145319	0.079935	0.140968	1.738553	1.068941	1.587496
A	NOX_STRI	0.090677	0.200214	0.131865	0.261006	0.933754	0.512744	11.05542
A	PM10_IDLI	0	0	0	0	0.001025	0.001299	0.000764
A	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034
A	PM10_PMI	0.008	0.008	0.008	0.008	0.010238	0.01073	0.012
A	PM10_RUNI	0.001905	0.002881	0.001808	0.001946	0.01955	0.015876	0.006721
A	PM10_STF	0.002286	0.003517	0.002231	0.002417	0.000914	0.00042	0.000934
A	PM25_IDLI	0	0	0	0	0.000981	0.001243	0.000731
A	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586
A	PM25_PMI	0.002	0.002	0.002	0.002	0.002559	0.002683	0.003
A	PM25_RUNI	0.001757	0.002654	0.001663	0.001795	0.018661	0.015167	0.006424
A	PM25_STF	0.002102	0.003234	0.002051	0.002225	0.000841	0.000386	0.000859
A	ROG_DIUF	0.028188	0.11304	0.039519	0.056173	0.002307	0.000812	0.000966
A	ROG_HTS	0.090086	0.304996	0.115811	0.165891	0.09354	0.033427	0.044108
A	ROG_IDLE	0	0	0	0	0.016555	0.014243	0.027049
A	ROG_RES	0.033032	0.121344	0.051976	0.075962	0.001728	0.000661	0.000726
A	ROG_RUN	0.017718	0.031481	0.015419	0.030737	0.143293	0.11196	0.061566
A	ROG_RUN	0.036077	0.206115	0.068796	0.096948	0.295313	0.07459	0.020322
A	ROG_STR	0.120243	0.235604	0.101235	0.219373	0.255249	0.110465	0.393816
A	SO2_IDLE	0	0	0	0	0.000093	0.000138	0.001406
A	SO2_RUNI	0.002704	0.003418	0.003809	0.005069	0.006737	0.007009	0.011584
A	SO2_STRE	0.000613	0.000792	0.00085	0.001134	0.00034	0.000271	0.000693
A	TOG_DIUF	0.028188	0.11304	0.039519	0.056173	0.002307	0.000812	0.000966
A	TOG_HTS	0.090086	0.304996	0.115811	0.165891	0.09354	0.033427	0.044108
A	TOG_IDLE	0	0	0	0	0.022811	0.019023	0.037377
A	TOG_RES	0.033032	0.121344	0.051976	0.075962	0.001728	0.000661	0.000726
A	TOG_RUN	0.025766	0.045795	0.022475	0.043414	0.175429	0.130665	0.073159
A	TOG_RUN	0.036077	0.206115	0.068796	0.096948	0.295313	0.07459	0.020322
A	TOG_STRI	0.131649	0.257949	0.110838	0.24013	0.279465	0.120945	0.431179
S	FleetMix	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.01594
S	CH4_IDLE	0	0	0	0	0.005189	0.003792	0.01569
S	CH4_RUNI	0.007605	0.013403	0.006668	0.01185	0.020844	0.008886	0.006391
S	CH4_STRE	0.007769	0.015093	0.006527	0.014108	0.018084	0.00785	0.054012
S	CO_IDLE	0	0	0	0	0.142709	0.124765	0.26288
S	CO_RUNE	0.720227	1.537386	0.818016	1.301933	1.223331	0.630567	0.451909
S	CO_STRE	1.338185	2.758873	1.313968	2.37077	2.367934	1.160131	6.199787
S	CO2_NBIC	0	0	0	0	9.281637	14.18079	154.7431
S	CO2_NBIC	285.3168	358.5065	401.5349	533.7209	687.4357	720.4456	1207.329
S	CO2_NBIC	58.49629	73.28469	82.33237	108.3367	29.29151	24.86012	57.75631
S	NOX_IDLE	0	0	0	0	0.091325	0.111512	0.642834

tblVehicleEF

S	NOX_RUN	0.063854	0.131011	0.072476	0.127717	1.668213	1.02819	1.527205
S	NOX_STRI	0.082511	0.182233	0.120003	0.237578	0.887977	0.489819	11.0075
S	PM10_IDLI	0	0	0	0	0.001025	0.001299	0.000644
S	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034
S	PM10_PM*	0.008	0.008	0.008	0.008	0.010238	0.01073	0.012
S	PM10_RUI	0.001905	0.002881	0.001808	0.001946	0.01955	0.015876	0.006721
S	PM10_STF	0.002286	0.003517	0.002231	0.002417	0.000914	0.00042	0.000934
S	PM25_IDLI	0	0	0	0	0.000981	0.001243	0.000616
S	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586
S	PM25_PM*	0.002	0.002	0.002	0.002	0.002559	0.002683	0.003
S	PM25_RUI	0.001757	0.002654	0.001663	0.001795	0.018661	0.015167	0.006424
S	PM25_STF	0.002102	0.003234	0.002051	0.002225	0.000841	0.000386	0.000859
S	ROG_DIUF	0.04365	0.17445	0.061001	0.08638	0.003335	0.001179	0.001429
S	ROG_HTS	0.094409	0.322185	0.120954	0.172276	0.097205	0.034762	0.046313
S	ROG_IDLE	0	0	0	0	0.016555	0.014243	0.025442
S	ROG_RES	0.054344	0.199222	0.084321	0.122667	0.002922	0.001121	0.001287
S	ROG_RUN	0.019058	0.033517	0.016564	0.032443	0.144467	0.112235	0.061833
S	ROG_RUN	0.033505	0.187939	0.063063	0.089264	0.284399	0.071761	0.019483
S	ROG_STR	0.104773	0.203561	0.088022	0.19034	0.243885	0.105864	0.375195
S	SO2_IDLE	0	0	0	0	0.000093	0.000138	0.001487
S	SO2_RUNI	0.002859	0.003604	0.004021	0.005345	0.006737	0.007009	0.011584
S	SO2_STRE	0.000608	0.000782	0.000845	0.001125	0.000338	0.00027	0.000686
S	TOG_DIUF	0.04365	0.17445	0.061001	0.08638	0.003335	0.001179	0.001429
S	TOG_HTSI	0.094409	0.322185	0.120954	0.172276	0.097205	0.034762	0.046313
S	TOG_IDLE	0	0	0	0	0.022811	0.019023	0.035153
S	TOG_RES	0.054344	0.199222	0.084321	0.122667	0.002922	0.001121	0.001287
S	TOG_RUN	0.027721	0.048766	0.024145	0.04599	0.177143	0.131066	0.073549
S	TOG_RUN	0.033505	0.187939	0.063063	0.089264	0.284399	0.071761	0.019483
S	TOG_STRI	0.114712	0.222868	0.096372	0.208351	0.267024	0.115907	0.410792
W	FleetMix	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.01594
W	CH4_IDLE	0	0	0	0	0.005189	0.003792	0.018089
W	CH4_RUNI	0.006948	0.012421	0.006106	0.01093	0.020161	0.008726	0.006236
W	CH4_STRE	0.009386	0.018446	0.00791	0.017151	0.019305	0.008344	0.05786
W	CO_IDLEX	0	0	0	0	0.142709	0.124765	0.499439
W	CO_RUNE	0.628138	1.37147	0.716892	1.163017	1.195591	0.624064	0.443583
W	CO_STRE:	1.731218	3.613403	1.704329	3.06912	2.570754	1.255099	6.773093
W	CO2_NBIC	0	0	0	0	9.281637	14.18079	134.1397
W	CO2_NBIC	267.1563	336.7476	376.5645	501.3177	687.4357	720.4456	1207.329
W	CO2_NBIC	58.49629	73.28469	82.33237	108.3367	29.29151	24.86012	57.75631
W	NOX_IDLE	0	0	0	0	0.091325	0.111512	0.59512
W	NOX_RUN	0.071214	0.147607	0.081102	0.143031	1.733408	1.065219	1.581048
W	NOX_STRI	0.093833	0.207162	0.13644	0.27005	0.954778	0.523302	11.07686
W	PM10_IDLI	0	0	0	0	0.001025	0.001299	0.000929
W	PM10_PMI	0.03675	0.03675	0.03675	0.03675	0.07644	0.08918	0.13034
W	PM10_PM*	0.008	0.008	0.008	0.008	0.010238	0.01073	0.012
W	PM10_RUI	0.001905	0.002881	0.001808	0.001946	0.01955	0.015876	0.006721
W	PM10_STF	0.002286	0.003517	0.002231	0.002417	0.000914	0.00042	0.000934
W	PM25_IDLI	0	0	0	0	0.000981	0.001243	0.000889
W	PM25_PMI	0.01575	0.01575	0.01575	0.01575	0.03276	0.03822	0.05586
W	PM25_PM*	0.002	0.002	0.002	0.002	0.002559	0.002683	0.003
W	PM25_RUI	0.001757	0.002654	0.001663	0.001795	0.018661	0.015167	0.006424
W	PM25_STF	0.002102	0.003234	0.002051	0.002225	0.000841	0.000386	0.000859

tblVehicleEF

W	ROG_DIUF	0.023301	0.095622	0.031622	0.044601	0.002144	0.000734	0.000903
W	ROG_HTS	0.099524	0.350951	0.126718	0.179433	0.111084	0.038318	0.049493
W	ROG_IDLE	0	0	0	0	0.016555	0.014243	0.029292
W	ROG_RES	0.027974	0.102826	0.044258	0.064752	0.001528	0.000582	0.000639
W	ROG_RUN	0.01743	0.031091	0.015175	0.030476	0.142778	0.111839	0.061449
W	ROG_RUN	0.04238	0.251513	0.083013	0.116116	0.326265	0.082622	0.0228
W	ROG_STR	0.126588	0.248781	0.106675	0.231404	0.260354	0.112534	0.401921
W	SO2_IDLE	0	0	0	0	0.000093	0.000138	0.001293
W	SO2_RUN	0.002676	0.003384	0.00377	0.00502	0.006737	0.007009	0.011584
W	SO2_STRE	0.000615	0.000796	0.000852	0.001137	0.000341	0.000272	0.000696
W	TOG_DIUF	0.023301	0.095622	0.031622	0.044601	0.002144	0.000734	0.000903
W	TOG_HTS	0.099524	0.350951	0.126718	0.179433	0.111084	0.038318	0.049493
W	TOG_IDLE	0	0	0	0	0.022811	0.019023	0.040484
W	TOG_RES	0.027974	0.102826	0.044258	0.064752	0.001528	0.000582	0.000639
W	TOG_RUN	0.025346	0.045224	0.022118	0.042983	0.174678	0.130488	0.072989
W	TOG_RUN	0.04238	0.251513	0.083013	0.116116	0.326265	0.082622	0.0228
W	TOG_STRI	0.138596	0.272375	0.116794	0.253298	0.285055	0.123211	0.440053

tblVehicleEF

HHD	OBUS	UBUS	MCY	SBUS	MH
0.023523	0.001912	0.001972	0.00609	0.000748	0.001193
0.775139	0.01277	0	0	0.87153	0
0.12727	0.013483	1.882628	0.479108	0.018348	0.051349
0.103567	0.031583	0.045045	0.15589	0.086847	0.030208
2.623706	0.289508	0	0	6.281745	0
1.151007	0.819521	8.126938	20.90316	1.090166	3.710918
3.461679	6.385142	6.990984	9.68975	7.519098	7.067911
4715.648	108.1677	0	0	1232.553	0
1659.46	1341.719	1953.867	181.5	1121.002	1239.67
10.26911	69.31159	109.9527	46.22325	40.31463	60.83084
21.83106	0.569286	0	0	11.52381	0
3.831515	1.833982	8.183633	1.162076	4.870339	1.698522
19.61814	2.430218	14.39278	0.314085	14.63566	0.972401
0.022212	0.0002	0	0	0.012428	0
0.060717	0.13034	0.584581	0.01176	0.7448	0.13034
0.035251	0.012	0.012	0.004	0.010919	0.012836
0.016697	0.008474	0.12575	0.002075	0.026779	0.032165
0.000105	0.000883	0.000876	0.003915	0.000748	0.001329
0.021251	0.000191	0	0	0.011891	0
0.026021	0.05586	0.250535	0.00504	0.3192	0.05586
0.008813	0.003	0.003	0.001	0.00273	0.003209
0.015975	0.008084	0.120286	0.001943	0.025605	0.030705
0.000096	0.000812	0.000806	0.003697	0.000688	0.001222
0.000099	0.001385	0.002101	0.925541	0.002402	1.122756
0.005333	0.01934	0.043229	0.7595	0.027483	0.095967
0.64805	0.041585	0	0	0.756798	0
0.000092	0.00088	0.002028	0.736536	0.001468	0.586649
0.131284	0.08316	0.606964	2.459244	0.12821	0.153362
0.000531	0.045953	0.008628	0.614066	0.012421	0.030029
0.1034	0.397679	0.607485	2.12714	0.382599	0.407385
0.043186	0.001044	0	0	0.011967	0
0.015119	0.013115	0.010923	0.002229	0.010787	0.01234
0.00016	0.000805	0.001227	0.000683	0.000533	0.000732
0.000099	0.001385	0.002101	0.925541	0.002402	1.122756
0.005333	0.01934	0.043229	0.7595	0.027483	0.095967
0.765286	0.056303	0	0	1.085384	0
0.000092	0.00088	0.002028	0.736536	0.001468	0.586649
0.271332	0.103301	2.562788	3.028628	0.157072	0.214259
0.000531	0.045953	0.008628	0.614066	0.012421	0.030029
0.11321	0.435409	0.665119	2.314463	0.418898	0.446035
0.023523	0.001912	0.001972	0.00609	0.000748	0.001193
0.730842	0.012731	0	0	0.871046	0
0.127315	0.013773	1.883604	0.465981	0.018752	0.05357
0.098614	0.030072	0.040923	0.135525	0.075528	0.028698
1.910494	0.273499	0	0	6.137899	0
1.158279	0.8351	8.146627	19.87765	1.11302	3.841159
3.252886	5.977012	5.965385	8.754843	5.879699	6.597885
4994.002	113.5843	0	0	1293.968	0
1659.46	1341.719	1953.867	181.5	1121.002	1239.67
10.26911	69.31159	109.9527	46.22325	40.31463	60.83084
22.5281	0.587522	0	0	11.89261	0

tblVehicleEF

3.68851	1.757177	7.892458	1.045233	4.689148	1.601079
19.60348	2.376549	14.33667	0.293977	14.59858	0.922026
0.019045	0.000168	0	0	0.010477	0
0.060717	0.13034	0.584581	0.01176	0.7448	0.13034
0.035251	0.012	0.012	0.004	0.010919	0.012836
0.016697	0.008474	0.12575	0.002075	0.026779	0.032165
0.000105	0.000883	0.000876	0.003915	0.000748	0.001329
0.018222	0.000161	0	0	0.010024	0
0.026021	0.05586	0.250535	0.00504	0.3192	0.05586
0.008813	0.003	0.003	0.001	0.00273	0.003209
0.015975	0.008084	0.120286	0.001943	0.025605	0.030705
0.000096	0.000812	0.000806	0.003697	0.000688	0.001222
0.00015	0.001964	0.002584	1.500505	0.003388	1.551297
0.005507	0.020031	0.045509	0.846997	0.028228	0.096915
0.611277	0.040799	0	0	0.753398	0
0.000167	0.001596	0.003634	1.442164	0.002669	1.026034
0.131393	0.083876	0.60938	2.377435	0.129211	0.158859
0.000518	0.044507	0.007727	0.570244	0.010871	0.029229
0.098455	0.378654	0.551888	1.849099	0.332733	0.38702
0.045735	0.001096	0	0	0.012553	0
0.015119	0.013116	0.010923	0.00221	0.010788	0.012342
0.000157	0.000798	0.001209	0.00066	0.000506	0.000724
0.00015	0.001964	0.002584	1.500505	0.003388	1.551297
0.005507	0.020031	0.045509	0.846997	0.028228	0.096915
0.721837	0.055408	0	0	1.081514	0
0.000167	0.001596	0.003634	1.442164	0.002669	1.026034
0.271491	0.104345	2.566313	2.930935	0.158533	0.22228
0.000518	0.044507	0.007727	0.570244	0.010871	0.029229
0.107796	0.414579	0.604247	2.012028	0.364301	0.423738
0.023523	0.001912	0.001972	0.00609	0.000748	0.001193
0.836312	0.012824	0	0	0.872197	0
0.127251	0.013357	1.882222	0.48627	0.01816	0.050416
0.10575	0.032264	0.046879	0.165638	0.092445	0.030908
3.608618	0.311615	0	0	6.480388	0
1.147863	0.812786	8.118643	21.61064	1.079607	3.655682
3.554822	6.575423	7.451045	10.17754	8.334553	7.290861
4331.255	100.6876	0	0	1147.743	0
1659.46	1341.719	1953.867	181.5	1121.002	1239.67
10.26911	69.31159	109.9527	46.22325	40.31463	60.83084
20.86849	0.544101	0	0	11.01452	0
3.819923	1.828908	8.144721	1.174723	4.851107	1.699533
19.6247	2.454579	14.41724	0.322693	14.65343	0.995242
0.026585	0.000243	0	0	0.015123	0
0.060717	0.13034	0.584581	0.01176	0.7448	0.13034
0.035251	0.012	0.012	0.004	0.010919	0.012836
0.016697	0.008474	0.12575	0.002075	0.026779	0.032165
0.000105	0.000883	0.000876	0.003915	0.000748	0.001329
0.025435	0.000232	0	0	0.014468	0
0.026021	0.05586	0.250535	0.00504	0.3192	0.05586
0.008813	0.003	0.003	0.001	0.00273	0.003209
0.015975	0.008084	0.120286	0.001943	0.025605	0.030705
0.000096	0.000812	0.000806	0.003697	0.000688	0.001222

tblVehicleEF

0.000088	0.001341	0.001957	0.840871	0.002345	1.165026
0.005898	0.020919	0.050248	1.02546	0.029624	0.125679
0.698832	0.042671	0	0	0.761492	0
0.00008	0.000797	0.001842	0.5779	0.001318	0.547613
0.131236	0.082848	0.60596	2.503055	0.127745	0.151053
0.000583	0.050132	0.010807	0.7216	0.015824	0.032083
0.105579	0.406255	0.632213	2.260234	0.407261	0.416829
0.039667	0.000973	0	0	0.011158	0
0.015119	0.013115	0.010923	0.002241	0.010787	0.012339
0.000162	0.000808	0.001235	0.000695	0.000547	0.000735
0.000088	0.001341	0.001957	0.840871	0.002345	1.165026
0.005898	0.020919	0.050248	1.02546	0.029624	0.125679
0.825286	0.057539	0	0	1.090728	0
0.00008	0.000797	0.001842	0.5779	0.001318	0.547613
0.271262	0.102845	2.561323	3.081087	0.156394	0.210889
0.000583	0.050132	0.010807	0.7216	0.015824	0.032083
0.115596	0.444798	0.692193	2.459229	0.445899	0.456376

tblRoadDust

RoadPerce	RoadSiltLo	MaterialSilt	MaterialMo	MobileAver	MeanVehic	CARB_PM_VMT
100	0.1	4.3	0.5	2.4	40	0

tblWoodstoves

Woodstove NumberCo NumberCa NumberNo NumberPe Woodstove WoodstoveWoodMass

tblFireplaces

FireplacesI NumberWc NumberGa NumberPrc NumberNo FireplaceH FireplaceD FireplaceWoodMass

tblConsumerProducts

ROG_EF	ROG_EF_I	ROG_EF_Pesticides	Fertilizers
2.14E-05	3.54E-07	5.15E-08	

tblAreaCoating

Area_EF_F	Area_Resic	Area_EF_F	Area_Resic	Area_EF_↑	Area_Nonr	Area_EF_↑	Area_Nonr	Reapplicati
250	0	250	0	250	0	250	0	10

tblAreaCoating

Area_EF_F	Area_Parking
250	0

tblLandscapeEquipment

NumberSn	NumberSummerDays
0	180

tblEnergyUse

EnergyUse T24E	NT24E	LightingEleT24NG	NT24NG		
General Liç	0	0	0	0	0

tblWater

WaterLand	WaterLand	IndoorWater	OutdoorWater	Electricity	Electricity	Electricity	Electricity	SepticTank
General Lic	1000sqft	0	0	9727	111	1272	1911	10.33

tblWater

AerobicPer	Anaerobic	AnaDigest	AnaDigest	Cogen	Comb	Digest	Gas	Percent
87.46	2.21	100	0					

tblSolidWaste

SolidWaste	SolidWaste	SolidWaste	LandfillNoC	LandfillCaç	LandfillCaptureGas	EnergyRecovery
General Liç	1000sqft	0	6	94	0	

tblLandUseChange

Vegetation Vegetation AcresBegin AcresEnd CO2peracre

BroadSpec NumberOf CO2perTree

tblConstEquipMitigation

ConstMitig; FuelType	Tier	NumberOf	TotalNumb	DPF	OxidationCatalyst
Crushing/P Diesel	Tier 3	2	2	No Change	0
Excavators Diesel	Tier 3	2	2	No Change	0
Graders Diesel	Tier 3	1	1	No Change	0
Rubber Tir Diesel	Tier 3	2	2	No Change	0
Scrapers Diesel	Tier 3	1	1	No Change	0
Tractors/Lc Diesel	Tier 3	5	4	No Change	0
Trenchers Diesel	Tier 3	2	2	No Change	0

tblConstDustMitigation

SoilStabiliz	SoilStabiliz	SoilStabiliz	ReplaceGr	ReplaceGr	ReplaceGr	WaterExpo	WaterExpo	WaterExpo
0	0	0	0	0	0	1	2	55

tblConstDustMitigation

WaterExpo	WaterUnpæ	WaterUnpæ	WaterUnpæ	WaterUnpæ	CleanPavedRoadPercentReduction
55	0	0	0	0	0

tblLandUseMitigation

ProjectSett IncreaseD€ IncreaseD€ IncreaseD€ IncreaseDi ImproveW€ ImproveW€ ImproveDe ImproveDe

tblLandUseMitigation

IncreaseTr: IncreaseTr: IntegrateBκ IntegrateBκ ImprovePe ImprovePe ProvideTra ProvideTra ProvideTra

tblLandUseMitigation

Implementl LimitParkin LimitParkin UnbundleP UnbundleP OnStreetM OnStreetM ProvideBR ProvideBR

tblLandUseMitigation

ExpandTra ExpandTra IncreaseTr: IncreaseTr: IncreaseTransitFrequencyHeadwaysPercentReduction

tblCommuteMitigation

Implement	Implement	Implement	TransitSub	TransitSub	TransitSub	Implement	Implement	Workplace
0	0		0	0		0	0	0

tblCommuteMitigation

Workplace	Workplace	Encourage	Encourage	Encourage	Encourage	MarketCon	MarketCon	Employee
0		0				0	0	0

tblCommuteMitigation

Employee\	Employee\	ProvideRid	ProvideRid	Implement!	Implement	SchoolBusProgram	PercentFamilyL
0	2	0	0	0	0		

Jsing

tblAreaMitigation

Landscape	Landscape	Landscape	Landscape	Landscape	Landscape	UseLowVC	UseLowVC	UseLowVC
1	100	1	100	1	100	0	250	0

tblAreaMitigation

UseLowVC	UseLowVC	UseLowVC	UseLowVC	UseLowVC	HearthOnly	NoHearthC	UseLowVC	UseLowVC
250	1	250	1	250	0	1	1	0

UseLowVOCPaintParkingValue
250

tblEnergyMitigation

ExceedTitl ExceedTitl InstallHigh InstallHigh OnSiteRen KwhGener: KwhGener: PercentOfE PercentOfE

ElectricityUseGenerated

tblApplianceMitigation

ApplianceT	ApplianceL	PercentImprovement
ClothWasher		30
DishWasher		15
Fan		50
Refrigerator		15

tblWaterMitigation

ApplyWate	ApplyWate	ApplyWate	UseReclair	PercentOu	PercentInd	UseGreyW	PercentOu	PercentInd
0	0	0	0	0	0	0	0	0

tblWaterMitigation

InstallLowF	PercentRei	InstallLowF	PercentRei	InstallLowF	PercentRei	InstallLowF	PercentRei	TurfReduct
0	32	0	18	0	20	0	20	0

tblWaterMitigation

TurfReduct	TurfReduct	UseWaterE	UseWaterE	WaterEffici	MAWA	ETWU
0	0	0	6.1	0	0	0

InstituteRe InstituteRecyclingAndCompostingServicesWastePercentReduction

tblOperationalOffRoadEquipment

OperOffRo OperOffRo OperHours OperDaysF OperHorse OperLoadF OperFuelType

tblFleetMix

FleetMixLa LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	
General Liç	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.01594	0.023523

OBUS	UBUS	MCY	SBUS	MH
0.001912	0.001972	0.00609	0.000748	0.001193

tblStationaryGeneratorsPumpsUse

Generators NumberOf Generators HorsePower Load_Factor HoursPerD HoursPerY GeneratorsPumpsEqui

ipmentDescription

tblStationaryBoilersUse

BoilerEquip NumberOf BoilerFuel BoilerRatin DailyHeatl AnnualHea BoilerEquipmentDescription

tblStationaryUserDefined

UserDefine UserDefine TOG_lb_d: TOG_tpy ROG_lb_d: ROG_tpy CO_lb_day CO_tpy NOX_lb_d:

tblStationaryUserDefined

NOX_tpy SO2_lb_dæSO2_tpy PM10_lb_cPM10_tpy PM2_5_lb_PM2_5_tpy CO2_lb_dæ CO2_tpy

tblStationaryUserDefined

CH4_lb_dæ CH4_tpy

tblStationaryGeneratorsPumpsEF

Generators TOG_EF TOG_EF_I ROG_EF ROG_EF_I CO_EF CO_EF_U NOX_EF NOX_EF_U

tblStationaryGeneratorsPumpsEF

SO2_EF SO2_EF_L PM10_EF PM10_EF_PM2_5_EF PM2_5_EF CO2_EF CO2_EF_L CH4_EF

CH4_EF_UOM

tblStationaryBoilersEF

BoilerEquip TOG_EF TOG_EF_I ROG_EF ROG_EF_I CO_EF CO_EF_U NOX_EF NOX_EF_U

tblStationaryBoilersEF

SO2_EF SO2_EF_L PM10_EF PM10_EF_PM2_5_EF PM2_5_EF CO2_EF CO2_EF_L CH4_EF

CH4_EF_UOM

tblRemarks

SubModule	PhaseNam	Season	Remarks
1			See Section 1.3, Project Description.
3			See Section 1.3, Project Description. Based on design documents pr
4			Based on information provided by the City.
5	Architectural Coating		See Section 7.2.1 for Construction Details.
5	Building Construction		See Section 7.2.1 for Construction Details.
5	Demolition		See Section 7.2.1 for Construction Details.
5	Grading		See Section 7.2.1 for Construction Details.
5	Paving		See Section 7.2.1 for Construction Details.
5	Portal Excavation		See Section 7.2.1 for Construction Details.
5	Site Preparation		See Section 7.2.1 for Construction Details.
5	Site Preparation at Poi		See Section 7.2.1 for Construction Details.
5	Site Restoration		See Section 7.2.1 for Construction Details.
5	Trenching		See Section 7.2.1 for Construction Details.
5	Tunnel Excavation		See Section 7.2.1 for Construction Details.
6			See Section 7.2.1 for trip information.
7			CalEEMod Defaults.
8			No demolition of structures anticipated.
9			See Section 7.2.1 for Construction Details.
10			No architectural coatings.
12			No mobile sources during operation.
13	A		CalEEMod defaults.
13	S		CalEEMod defaults.
13	W		CalEEMod defaults.
14			CalEEMod defaults.
15			No hearths.
17			No consumer products.
18			No coatings used in this project phase.
19			There is no landscaping for this project.
20			No energy use for this project.
21			No water use for this project.
22			No solid waste for this project.
23			No land use change.
24			No land use change.
25			Per MM1, all construction equipment will be at least Tier 3. See Secti
27			No traffic mitigation.
28			No traffic mitigation.
29			No architectural coatings for this project. Electric landscape equipme
30			No energy mitigation.
32			No water use mitigation.
33			No solid waste mitigation.
36			No stationary sources.
37			No stationary sources.
38			No stationary sources.
39			No stationary sources.
40			No stationary sources.

provided by the City.

ion 7.2.1 Construction Impacts for more information.

nt is implemented to show no landscaping equipment as model will not take out the summer days.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Landfill Gas Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.45	1000sqft	0.08	3,452.97	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	1726	0
tblAreaCoating	Area_Nonresidential_Interior	5179	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	20.00
tblConstructionPhase	NumDays	1.00	120.00
tblConstructionPhase	NumDays	1.00	120.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	21.00	0.00
tblLandUse	BuildingSpaceSquareFeet	3,450.00	3,452.97
tblLandUse	LandUseSquareFeet	3,450.00	3,452.97
tblProjectCharacteristics	OperationalYear	2018	2021
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	4.28	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	797,812.50	0.00

2.0 Emissions Summary

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0739	0.0000	3.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000	0.0000	8.1000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0684	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000	0.0000	4.3000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.51	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.05	46.05	0.00	0.00	46.91

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	3/2/2020	3/27/2020	5	20	
2	Portal Excavation	Site Preparation	3/30/2020	9/11/2020	5	120	
3	Site Restoration	Site Preparation	9/14/2020	2/26/2021	5	120	
4	Tunnel Excavation	Trenching	3/1/2021	10/5/2021	5	157	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunnel Excavation	Excavators	1	8.00	158	0.38
Tunnel Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Tunnel Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tunnel Excavation	Trenchers	1	8.00	78	0.50

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunnel Excavation	5	26.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.6782	20.1828	11.5528	0.0249		0.7937	0.7937		0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	1.6782	20.1828	11.5528	0.0249	0.0000	0.7937	0.7937	0.0000	0.7302	0.7302		2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180
Total	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.5777	11.9870	13.9515	0.0249		0.5110	0.5110		0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4
Total	0.5777	11.9870	13.9515	0.0249	0.0000	0.5110	0.5110	0.0000	0.5137	0.5137	0.0000	2,410.502 3	2,410.502 3	0.7796		2,429.992 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180
Total	0.0472	0.0330	0.3081	9.8000e-004	0.1022	6.9000e-004	0.1029	0.0271	6.4000e-004	0.0277		97.4472	97.4472	2.8300e-003		97.5180

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.3158	0.0000	4.3158	2.3723	0.0000	2.3723			0.0000			0.0000
Off-Road	2.5068	23.4458	16.6677	0.0272		1.3301	1.3301		1.2430	1.2430		2,619.5716	2,619.5716	0.6814		2,636.6069
Total	2.5068	23.4458	16.6677	0.0272	4.3158	1.3301	5.6459	2.3723	1.2430	3.6153		2,619.5716	2,619.5716	0.6814		2,636.6069

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9421	0.0000	1.9421	1.0676	0.0000	1.0676			0.0000			0.0000
Off-Road	0.6016	13.2298	17.6778	0.0272		0.7472	0.7472		0.7498	0.7498	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069
Total	0.6016	13.2298	17.6778	0.0272	1.9421	0.7472	2.6893	1.0676	0.7498	1.8174	0.0000	2,619.5716	2,619.5716	0.6814		2,636.6069

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0426	1.6417	2.3577	3.1100e-003		0.1186	0.1186		0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0426	1.6417	2.3577	3.1100e-003	0.0000	0.1186	0.1186	0.0000	0.1213	0.1213	0.0000	300.7685	300.7685	0.0973		303.2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003	0.0000	0.1118	0.1118	0.0000	0.1028	0.1028		300.9001	300.9001	0.0973		303.3330

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178
Total	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0481	1.6940	2.3625	3.1100e-003		0.1240	0.1240		0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330
Total	0.0481	1.6940	2.3625	3.1100e-003	0.0000	0.1240	0.1240	0.0000	0.1262	0.1262	0.0000	300.9001	300.9001	0.0973		303.3330

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178
Total	0.0223	0.0150	0.1440	4.7000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.1000e-004	0.0139		47.0852	47.0852	1.3100e-003		47.1178

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471
Total	2.3575	22.0277	16.5155	0.0272		1.2118	1.2118		1.1315	1.1315		2,619.8969	2,619.8969	0.6780		2,636.8471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Tunnel Excavation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471
Total	0.6072	13.2821	17.6827	0.0272		0.7525	0.7525		0.7547	0.7547	0.0000	2,619.8969	2,619.8969	0.6780		2,636.8471

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	6.0400e-003	0.1948	0.0553	4.9000e-004	0.0123	4.1000e-004	0.0127	3.5300e-003	3.9000e-004	3.9200e-003		52.3397	52.3397	4.2200e-003		52.4451
Worker	0.1450	0.0975	0.9358	3.0700e-003	0.3321	2.2100e-003	0.3343	0.0881	2.0300e-003	0.0901		306.0535	306.0535	8.5000e-003		306.2660
Total	0.1511	0.2923	0.9912	3.5600e-003	0.3444	2.6200e-003	0.3470	0.0916	2.4200e-003	0.0940		358.3932	358.3932	0.0127		358.7111

4.0 Operational Detail - Mobile

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Unmitigated	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0739					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004
Total	0.0739	0.0000	3.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		7.6000e-004	7.6000e-004	0.0000		8.1000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0684					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004
Total	0.0684	0.0000	2.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.1000e-004	4.1000e-004	0.0000		4.3000e-004

7.0 Water Detail

Landfill Gas Pipeline-Trenchless - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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MBC Improvements
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

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tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-24-2019	7-23-2019	0.3939	0.1475
2	7-24-2019	10-23-2019	0.5319	0.3283
3	10-24-2019	1-23-2020	0.5207	0.3284
4	1-24-2020	4-23-2020	0.4161	0.2769
		Highest	0.5319	0.3284

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	50.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0139	0.1377	0.0845	1.5000e-004		7.1100e-003	7.1100e-003		6.6800e-003	6.6800e-003	0.0000	13.2797	13.2797	3.2100e-003	0.0000	13.3599
Total	0.0139	0.1377	0.0845	1.5000e-004		7.1100e-003	7.1100e-003		6.6800e-003	6.6800e-003	0.0000	13.2797	13.2797	3.2100e-003	0.0000	13.3599

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618
Total	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4700e-003	0.0518	0.0875	1.5000e-004		3.6300e-003	3.6300e-003		3.5500e-003	3.5500e-003	0.0000	13.2796	13.2796	3.2100e-003	0.0000	13.3599
Total	4.4700e-003	0.0518	0.0875	1.5000e-004		3.6300e-003	3.6300e-003		3.5500e-003	3.5500e-003	0.0000	13.2796	13.2796	3.2100e-003	0.0000	13.3599

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618
Total	3.0000e-004	2.3000e-004	2.1900e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5614	0.5614	2.0000e-005	0.0000	0.5618

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	6.2100e-003	0.0000	6.2100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1024	0.1122	1.9000e-004		4.7300e-003	4.7300e-003		4.4200e-003	4.4200e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945
Total	0.0113	0.1024	0.1122	1.9000e-004	0.0113	4.7300e-003	0.0160	6.2100e-003	4.4200e-003	0.0106	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.0800e-003	0.0000	5.0800e-003	2.7900e-003	0.0000	2.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113		0.1122	1.9000e-004		4.7300e-003	4.7300e-003		4.4200e-003	4.4200e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945
Total	0.0113		0.1122	1.9000e-004	5.0800e-003	4.7300e-003	9.8100e-003	2.7900e-003	4.4200e-003	7.2100e-003	0.0000	16.5770	16.5770	4.7000e-003	0.0000	16.6945

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237
Total	5.9000e-004	4.5000e-004	4.3900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1227	1.1227	4.0000e-005	0.0000	1.1237

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1082	0.9282	0.6873	1.2300e-003		0.0500	0.0500		0.0478	0.0478	0.0000	104.5673	104.5673	0.0214	0.0000	105.1015
Total	0.1082	0.9282	0.6873	1.2300e-003		0.0500	0.0500		0.0478	0.0478	0.0000	104.5673	104.5673	0.0214	0.0000	105.1015

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1000e-004	0.0164	4.4200e-003	4.0000e-005	8.7000e-004	1.1000e-004	9.8000e-004	2.5000e-004	1.1000e-004	3.6000e-004	0.0000	3.4804	3.4804	2.8000e-004	0.0000	3.4874
Worker	4.1300e-003	3.1700e-003	0.0307	9.0000e-005	8.4000e-003	6.0000e-005	8.4700e-003	2.2300e-003	6.0000e-005	2.2900e-003	0.0000	7.8442	7.8442	2.5000e-004	0.0000	7.8506
Total	4.7400e-003	0.0196	0.0351	1.3000e-004	9.2700e-003	1.7000e-004	9.4500e-003	2.4800e-003	1.7000e-004	2.6500e-003	0.0000	11.3246	11.3246	5.3000e-004	0.0000	11.3379

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0298	0.6006	0.7184	1.2300e-003		0.0353	0.0353		0.0353	0.0353	0.0000	104.5671	104.5671	0.0214	0.0000	105.1013
Total	0.0298	0.6006	0.7184	1.2300e-003		0.0353	0.0353		0.0353	0.0353	0.0000	104.5671	104.5671	0.0214	0.0000	105.1013

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1000e-004	0.0164	4.4200e-003	4.0000e-005	8.7000e-004	1.1000e-004	9.8000e-004	2.5000e-004	1.1000e-004	3.6000e-004	0.0000	3.4804	3.4804	2.8000e-004	0.0000	3.4874
Worker	4.1300e-003	3.1700e-003	0.0307	9.0000e-005	8.4000e-003	6.0000e-005	8.4700e-003	2.2300e-003	6.0000e-005	2.2900e-003	0.0000	7.8442	7.8442	2.5000e-004	0.0000	7.8506
Total	4.7400e-003	0.0196	0.0351	1.3000e-004	9.2700e-003	1.7000e-004	9.4500e-003	2.4800e-003	1.7000e-004	2.6500e-003	0.0000	11.3246	11.3246	5.3000e-004	0.0000	11.3379

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0513	0.4473	0.3530	6.5000e-004		0.0229	0.0229		0.0219	0.0219	0.0000	54.4767	54.4767	0.0110	0.0000	54.7515
Total	0.0513	0.4473	0.3530	6.5000e-004		0.0229	0.0229		0.0219	0.0219	0.0000	54.4767	54.4767	0.0110	0.0000	54.7515

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	7.8600e-003	2.0900e-003	2.0000e-005	4.6000e-004	4.0000e-005	5.0000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8206	1.8206	1.4000e-004	0.0000	1.8241
Worker	2.0300e-003	1.5100e-003	0.0148	4.0000e-005	4.4300e-003	3.0000e-005	4.4600e-003	1.1800e-003	3.0000e-005	1.2100e-003	0.0000	4.0013	4.0013	1.2000e-004	0.0000	4.0043
Total	2.2900e-003	9.3700e-003	0.0148	6.0000e-005	4.8900e-003	7.0000e-005	4.9600e-003	1.3100e-003	7.0000e-005	1.3800e-003	0.0000	5.8220	5.8220	2.6000e-004	0.0000	5.8285

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0157	0.3164	0.3784	6.5000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	54.4766	54.4766	0.0110	0.0000	54.7514
Total	0.0157	0.3164	0.3784	6.5000e-004		0.0186	0.0186		0.0186	0.0186	0.0000	54.4766	54.4766	0.0110	0.0000	54.7514

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	7.8600e-003	2.0900e-003	2.0000e-005	4.6000e-004	4.0000e-005	5.0000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8206	1.8206	1.4000e-004	0.0000	1.8241
Worker	2.0300e-003	1.5100e-003	0.0148	4.0000e-005	4.4300e-003	3.0000e-005	4.4600e-003	1.1800e-003	3.0000e-005	1.2100e-003	0.0000	4.0013	4.0013	1.2000e-004	0.0000	4.0043
Total	2.2900e-003	9.3700e-003	0.0149	6.0000e-005	4.8900e-003	7.0000e-005	4.9600e-003	1.3100e-003	7.0000e-005	1.3800e-003	0.0000	5.8220	5.8220	2.6000e-004	0.0000	5.8285

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3600e-003	0.0245	0.0255	4.0000e-005		1.3100e-003	1.3100e-003		1.2100e-003	1.2100e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3600e-003	0.0245	0.0255	4.0000e-005		1.3100e-003	1.3100e-003		1.2100e-003	1.2100e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161

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3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570
Total	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.3500e-003	0.0130	0.0282	4.0000e-005		1.1100e-003	1.1100e-003		1.0800e-003	1.0800e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.3500e-003	0.0130	0.0282	4.0000e-005		1.1100e-003	1.1100e-003		1.0800e-003	1.0800e-003	0.0000	3.4879	3.4879	1.1300e-003	0.0000	3.5161

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570
Total	2.3000e-004	1.7000e-004	1.6900e-003	1.0000e-005	5.1000e-004	0.0000	5.1000e-004	1.3000e-004	0.0000	1.4000e-004	0.0000	0.4567	0.4567	1.0000e-005	0.0000	0.4570

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

MBC Improvements - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

MBC Improvements - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

MBC Improvements - San Diego County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

MBC Improvements - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

MBC Improvements - San Diego County APCD Air District, Annual

MBC Improvements - San Diego County APCD Air District, Summer

MBC Improvements
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

MBC Improvements - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

MBC Improvements - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

MBC Improvements - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

MBC Improvements - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	100.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MBC Improvements - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

MBC Improvements - San Diego County APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4
Total	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4

MBC Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684
Total	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684

MBC Improvements - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129	0.7528	0.3153	1.0681	0.4138	0.2945	0.7083		1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.7514		7.4816	0.0129		0.3153	0.3153		0.2945	0.2945	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514		7.4816	0.0129	0.3387	0.3153	0.6541	0.1862	0.2945	0.4807	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714
Total	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664
Total	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

MBC Improvements - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

MBC Improvements - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

MBC Improvements - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

MBC Improvements - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

MBC Improvements - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

MBC Improvements - San Diego County APCD Air District, Winter

MBC Improvements
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

MBC Improvements - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - No water use.

Solid Waste - No solid waste generation.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

MBC Improvements - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	30.00
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	PhaseEndDate	10/20/2021	4/6/2020
tblConstructionPhase	PhaseStartDate	4/24/2019	7/2/2019
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblOffRoadEquipment	HorsePower	16.00	97.00
tblOffRoadEquipment	LoadFactor	0.38	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType	Tractors/Loaders/Backhoes	Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Building Construction

MBC Improvements - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Demolition
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	1.24	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	16.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,250.00	0.00

2.0 Emissions Summary

MBC Improvements - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000	0.0000	1.2000e-004

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	100.00	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	47.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2019	5/21/2019	5	15	
2	Grading	Grading	5/21/2019	7/1/2019	5	30	
3	Building Construction	Building Construction	7/2/2019	4/6/2020	5	200	
4	Paving	Paving	4/7/2020	4/15/2020	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

MBC Improvements - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Dumpers/Tenders	2	8.00	97	0.37
Demolition	Excavators	1	8.00	158	0.38
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	7	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

MBC Improvements - San Diego County APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4
Total	1.8586	18.3582	11.2658	0.0200		0.9482	0.9482		0.8907	0.8907		1,951.775 4	1,951.775 4	0.4717		1,963.568 4

MBC Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684
Total	0.5963	6.9002	11.6688	0.0200		0.4836	0.4836		0.4732	0.4732	0.0000	1,951.7754	1,951.7754	0.4717		1,963.5684

MBC Improvements - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000
Off-Road	0.7514	6.8242	7.4816	0.0129		0.3153	0.3153		0.2945	0.2945		1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514	6.8242	7.4816	0.0129	0.7528	0.3153	1.0681	0.4138	0.2945	0.7083		1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3387	0.0000	0.3387	0.1862	0.0000	0.1862			0.0000			0.0000
Off-Road	0.7514		7.4816	0.0129		0.3153	0.3153		0.2945	0.2945	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340
Total	0.7514		7.4816	0.0129	0.3387	0.3153	0.6541	0.1862	0.2945	0.4807	0.0000	1,218.2018	1,218.2018	0.3453		1,226.8340

MBC Improvements - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714
Total	1.6511	14.1706	10.4925	0.0187		0.7626	0.7626		0.7298	0.7298		1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,759.7811	1,759.7811	0.3596		1,768.7714

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664
Total	1.4869	12.9652	10.2331	0.0187		0.6638	0.6638		0.6354	0.6354		1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664
Total	0.4552	9.1697	10.9672	0.0187		0.5382	0.5382		0.5382	0.5382	0.0000	1,740.5868	1,740.5868	0.3512		1,749.3664

MBC Improvements - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6755	7.0036	7.2915	0.0113		0.3749	0.3749		0.3449	0.3449		1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3845	3.7032	8.0467	0.0113		0.3164	0.3164		0.3080	0.3080	0.0000	1,098.4968	1,098.4968	0.3553		1,107.3787

MBC Improvements - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

MBC Improvements - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

MBC Improvements - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

MBC Improvements - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Unmitigated	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

MBC Improvements - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004
Total	0.0000	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-004	1.2000e-004	0.0000		1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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MBC Improvements - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Mission Trails Booster Station - San Diego County APCD Air District, Annual

Mission Trails Booster Station
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.03	1000sqft	0.09	4,025.00	1

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information. For HRA vendor and haul truck trip length was assumed for onsite diesel emissions only.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use represents grid supplied only. All other energy use emissions are calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.83	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.21	2,484.47
tblEnergyUse	T24NG	4.31	0.00
tblGrading	AcresOfGrading	22.50	1.10
tblGrading	MaterialExported	0.00	700,000.00
tblGrading	MaterialImported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	4,030.00	4,025.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Paving
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tblOffRoadEquipment	PhaseName		Grading
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tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching

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tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	5.00	0.29
tblTripsAndVMT	HaulingTripNumber	101,500.00	36,750.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblVehicleTrips	CC_TL	6.60	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00

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tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	931,937.50	10,400.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-9-2019	8-8-2019	6.2812	6.0640
2	8-9-2019	11-8-2019	0.3203	0.2269
3	11-9-2019	2-8-2020	0.2759	0.1922
4	2-9-2020	5-8-2020	0.2558	0.1871
5	5-9-2020	8-8-2020	0.2172	0.1610
		Highest	6.2812	6.0640

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0176	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3,268.0850	3,268.0850	0.1315	0.0272	3,279.4837
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0176	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	3,268.1293	3,268.1915	0.1354	0.0272	3,279.6882

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0176	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3,268.0850	3,268.0850	0.1315	0.0272	3,279.4837
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0176	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	3,268.1293	3,268.1914	0.1354	0.0272	3,279.6882

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/9/2019	6/19/2019	5	30	
2	Trenching	Trenching	6/20/2019	8/28/2019	5	50	
3	Building Construction	Building Construction	8/29/2019	7/15/2020	5	230	
4	Paving	Paving	7/16/2020	7/22/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	0	4.00	81	0.73
Grading	Graders	1	4.00	187	0.41
Grading	Off-Highway Trucks	1	4.00	402	0.38
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Scrapers	1	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Concrete/Industrial Saws	1	4.00	81	0.73
Trenching	Excavators	1	4.00	158	0.38
Trenching	Off-Highway Trucks	1	4.00	402	0.38
Trenching	Rollers	1	4.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Welders	2	4.00	46	0.45
Building Construction	Aerial Lifts	2	4.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Rollers	1	4.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	0	4.00	9	0.56
Paving	Crushing/Proc. Equipment	1	4.00	85	0.78
Paving	Off-Highway Trucks	1	4.00	402	0.38
Paving	Pavers	1	4.00	130	0.42
Paving	Rollers	1	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	30.00	0.00	36,750.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1028	0.0000	0.1028	0.0335	0.0000	0.0335	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3276	0.1725	3.8000e-004		0.0142	0.0142		0.0130	0.0130	0.0000	33.7484	33.7484	0.0106	0.0000	34.0141
Total	0.0293	0.3276	0.1725	3.8000e-004	0.1028	0.0142	0.1170	0.0335	0.0130	0.0466	0.0000	33.7484	33.7484	0.0106	0.0000	34.0141

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3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1614	5.6310	1.2284	0.0145	0.3144	0.0210	0.3355	0.0864	0.0201	0.1065	0.0000	1,432.5050	1,432.5050	0.1297	0.0000	1,435.7474
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	2.0200e-003	0.0191	6.0000e-005	5.6100e-003	4.0000e-005	5.6500e-003	1.4900e-003	4.0000e-005	1.5300e-003	0.0000	5.1865	5.1865	1.6000e-004	0.0000	5.1906
Total	0.1639	5.6331	1.2475	0.0145	0.3200	0.0211	0.3411	0.0879	0.0202	0.1080	0.0000	1,437.6915	1,437.6915	0.1299	0.0000	1,440.9379

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0463	0.0000	0.0463	0.0151	0.0000	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.1500e-003	0.1808	0.2086	3.8000e-004		7.6900e-003	7.6900e-003		7.6900e-003	7.6900e-003	0.0000	33.7484	33.7484	0.0106	0.0000	34.0141
Total	9.1500e-003	0.1808	0.2086	3.8000e-004	0.0463	7.6900e-003	0.0540	0.0151	7.6900e-003	0.0228	0.0000	33.7484	33.7484	0.0106	0.0000	34.0141

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3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.1614	5.6310	1.2284	0.0145	0.3144	0.0210	0.3355	0.0864	0.0201	0.1065	0.0000	1,432.5050	1,432.5050	0.1297	0.0000	1,435.7474
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4900e-003	2.0200e-003	0.0191	6.0000e-005	5.6100e-003	4.0000e-005	5.6500e-003	1.4900e-003	4.0000e-005	1.5300e-003	0.0000	5.1865	5.1865	1.6000e-004	0.0000	5.1906
Total	0.1639	5.6331	1.2475	0.0145	0.3200	0.0211	0.3411	0.0879	0.0202	0.1080	0.0000	1,437.6915	1,437.6915	0.1299	0.0000	1,440.9379

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0362	0.2953	0.2636	4.8000e-004		0.0160	0.0160		0.0151	0.0151	0.0000	41.9714	41.9714	0.0109	0.0000	42.2445
Total	0.0362	0.2953	0.2636	4.8000e-004		0.0160	0.0160		0.0151	0.0151	0.0000	41.9714	41.9714	0.0109	0.0000	42.2445

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3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-003	2.9200e-003	0.0275	8.0000e-005	8.1000e-003	6.0000e-005	8.1600e-003	2.1500e-003	5.0000e-005	2.2100e-003	0.0000	7.4917	7.4917	2.3000e-004	0.0000	7.4975
Total	3.6000e-003	2.9200e-003	0.0275	8.0000e-005	8.1000e-003	6.0000e-005	8.1600e-003	2.1500e-003	5.0000e-005	2.2100e-003	0.0000	7.4917	7.4917	2.3000e-004	0.0000	7.4975

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0125	0.2485	0.3055	4.8000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	41.9714	41.9714	0.0109	0.0000	42.2445
Total	0.0125	0.2485	0.3055	4.8000e-004		0.0138	0.0138		0.0138	0.0138	0.0000	41.9714	41.9714	0.0109	0.0000	42.2445

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3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-003	2.9200e-003	0.0275	8.0000e-005	8.1000e-003	6.0000e-005	8.1600e-003	2.1500e-003	5.0000e-005	2.2100e-003	0.0000	7.4917	7.4917	2.3000e-004	0.0000	7.4975
Total	3.6000e-003	2.9200e-003	0.0275	8.0000e-005	8.1000e-003	6.0000e-005	8.1600e-003	2.1500e-003	5.0000e-005	2.2100e-003	0.0000	7.4917	7.4917	2.3000e-004	0.0000	7.4975

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0354	0.3337	0.2601	4.2000e-004		0.0178	0.0178		0.0166	0.0166	0.0000	36.9323	36.9323	0.0111	0.0000	37.2088
Total	0.0354	0.3337	0.2601	4.2000e-004		0.0178	0.0178		0.0166	0.0166	0.0000	36.9323	36.9323	0.0111	0.0000	37.2088

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0106	2.8600e-003	2.0000e-005	5.3000e-004	7.0000e-005	6.0000e-004	1.5000e-004	7.0000e-005	2.2000e-004	0.0000	2.1826	2.1826	1.8000e-004	0.0000	2.1871
Worker	3.9400e-003	3.2000e-003	0.0302	9.0000e-005	8.8800e-003	6.0000e-005	8.9400e-003	2.3600e-003	6.0000e-005	2.4200e-003	0.0000	8.2063	8.2063	2.6000e-004	0.0000	8.2126
Total	4.3300e-003	0.0138	0.0330	1.1000e-004	9.4100e-003	1.3000e-004	9.5400e-003	2.5100e-003	1.3000e-004	2.6400e-003	0.0000	10.3888	10.3888	4.4000e-004	0.0000	10.3998

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0113	0.2310	0.2805	4.2000e-004		0.0139	0.0139		0.0139	0.0139	0.0000	36.9322	36.9322	0.0111	0.0000	37.2087
Total	0.0113	0.2310	0.2805	4.2000e-004		0.0139	0.0139		0.0139	0.0139	0.0000	36.9322	36.9322	0.0111	0.0000	37.2087

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9000e-004	0.0106	2.8600e-003	2.0000e-005	5.3000e-004	7.0000e-005	6.0000e-004	1.5000e-004	7.0000e-005	2.2000e-004	0.0000	2.1826	2.1826	1.8000e-004	0.0000	2.1871
Worker	3.9400e-003	3.2000e-003	0.0302	9.0000e-005	8.8800e-003	6.0000e-005	8.9400e-003	2.3600e-003	6.0000e-005	2.4200e-003	0.0000	8.2063	8.2063	2.6000e-004	0.0000	8.2126
Total	4.3300e-003	0.0138	0.0330	1.1000e-004	9.4100e-003	1.3000e-004	9.5400e-003	2.5100e-003	1.3000e-004	2.6400e-003	0.0000	10.3888	10.3888	4.4000e-004	0.0000	10.3998

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0506	0.4841	0.4027	6.7000e-004		0.0247	0.0247		0.0230	0.0230	0.0000	57.3809	57.3809	0.0174	0.0000	57.8158
Total	0.0506	0.4841	0.4027	6.7000e-004		0.0247	0.0247		0.0230	0.0230	0.0000	57.3809	57.3809	0.0174	0.0000	57.8158

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0154	4.0700e-003	4.0000e-005	8.5000e-004	7.0000e-005	9.2000e-004	2.4000e-004	7.0000e-005	3.1000e-004	0.0000	3.4349	3.4349	2.7000e-004	0.0000	3.4417
Worker	5.8500e-003	4.5800e-003	0.0437	1.4000e-004	0.0141	1.0000e-004	0.0142	3.7400e-003	9.0000e-005	3.8300e-003	0.0000	12.5902	12.5902	3.7000e-004	0.0000	12.5994
Total	6.3600e-003	0.0199	0.0478	1.8000e-004	0.0149	1.7000e-004	0.0151	3.9800e-003	1.6000e-004	4.1400e-003	0.0000	16.0251	16.0251	6.4000e-004	0.0000	16.0411

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0179	0.3660	0.4443	6.7000e-004		0.0220	0.0220		0.0220	0.0220	0.0000	57.3809	57.3809	0.0174	0.0000	57.8157
Total	0.0179	0.3660	0.4443	6.7000e-004		0.0220	0.0220		0.0220	0.0220	0.0000	57.3809	57.3809	0.0174	0.0000	57.8157

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0154	4.0700e-003	4.0000e-005	8.5000e-004	7.0000e-005	9.2000e-004	2.4000e-004	7.0000e-005	3.1000e-004	0.0000	3.4349	3.4349	2.7000e-004	0.0000	3.4417
Worker	5.8500e-003	4.5800e-003	0.0437	1.4000e-004	0.0141	1.0000e-004	0.0142	3.7400e-003	9.0000e-005	3.8300e-003	0.0000	12.5902	12.5902	3.7000e-004	0.0000	12.5994
Total	6.3600e-003	0.0199	0.0478	1.8000e-004	0.0149	1.7000e-004	0.0151	3.9800e-003	1.6000e-004	4.1400e-003	0.0000	16.0251	16.0251	6.4000e-004	0.0000	16.0411

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.3700e-003	0.0214	0.0190	4.0000e-005		1.0900e-003	1.0900e-003		1.0300e-003	1.0300e-003	0.0000	3.3489	3.3489	9.0000e-004	0.0000	3.3713
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.3700e-003	0.0214	0.0190	4.0000e-005		1.0900e-003	1.0900e-003		1.0300e-003	1.0300e-003	0.0000	3.3489	3.3489	9.0000e-004	0.0000	3.3713

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3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.7400e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5023	0.5023	1.0000e-005	0.0000	0.5026
Total	2.3000e-004	1.8000e-004	1.7400e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5023	0.5023	1.0000e-005	0.0000	0.5026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0000e-004	0.0186	0.0240	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.3489	3.3489	9.0000e-004	0.0000	3.3713
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.0000e-004	0.0186	0.0240	4.0000e-005		9.9000e-004	9.9000e-004		9.9000e-004	9.9000e-004	0.0000	3.3489	3.3489	9.0000e-004	0.0000	3.3713

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.8000e-004	1.7400e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5023	0.5023	1.0000e-005	0.0000	0.5026
Total	2.3000e-004	1.8000e-004	1.7400e-003	1.0000e-005	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5023	0.5023	1.0000e-005	0.0000	0.5026

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Mission Trails Booster Station - San Diego County APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Mission Trails Booster Station - San Diego County APCD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	9.99999e+006	3,268.0850	0.1315	0.0272	3,279.4837
Total		3,268.0850	0.1315	0.0272	3,279.4837

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	9.99999e+006	3,268.0850	0.1315	0.0272	3,279.4837
Total		3,268.0850	0.1315	0.0272	3,279.4837

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0176	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Unmitigated	0.0176	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005
Total	0.0176	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	8.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	0.0176	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

Mission Trails Booster Station - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

Mission Trails Booster Station - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

Mission Trails Booster Station - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Mission Trails Booster Station
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.03	1000sqft	0.09	4,025.00	1

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information. For HRA vendor and haul truck trip length was assumed for onsite diesel emissions only.

On-road Fugitive Dust - CalEEMod Defaults.

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use represents grid supplied only. All other energy use emissions are calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Mission Trails Booster Station - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.83	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.21	2,484.47
tblEnergyUse	T24NG	4.31	0.00
tblGrading	AcresOfGrading	22.50	1.10
tblGrading	MaterialExported	0.00	700,000.00
tblGrading	MaterialImported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	4,030.00	4,025.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

Mission Trails Booster Station - San Diego County APCD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching

Mission Trails Booster Station - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	5.00	0.29
tblTripsAndVMT	HaulingTripNumber	101,500.00	36,750.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblVehicleTrips	CC_TL	6.60	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00

Mission Trails Booster Station - San Diego County APCD Air District, Summer

tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	931,937.50	10,400.00

2.0 Emissions Summary

Mission Trails Booster Station - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0964	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.4000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0964	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000	0.0000	5.0000e-004

Mission Trails Booster Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.02	0.00	41.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	46.81

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/9/2019	6/19/2019	5	30	
2	Trenching	Trenching	6/20/2019	8/28/2019	5	50	
3	Building Construction	Building Construction	8/29/2019	7/15/2020	5	230	
4	Paving	Paving	7/16/2020	7/22/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	0	4.00	81	0.73
Grading	Graders	1	4.00	187	0.41
Grading	Off-Highway Trucks	1	4.00	402	0.38
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Scrapers	1	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Concrete/Industrial Saws	1	4.00	81	0.73
Trenching	Excavators	1	4.00	158	0.38
Trenching	Off-Highway Trucks	1	4.00	402	0.38
Trenching	Rollers	1	4.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Welders	2	4.00	46	0.45
Building Construction	Aerial Lifts	2	4.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Rollers	1	4.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	0	4.00	9	0.56
Paving	Crushing/Proc. Equipment	1	4.00	85	0.78
Paving	Off-Highway Trucks	1	4.00	402	0.38
Paving	Pavers	1	4.00	130	0.42
Paving	Rollers	1	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Trips and VMT

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	30.00	0.00	36,750.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.8533	0.0000	6.8533	2.2353	0.0000	2.2353			0.0000			0.0000
Off-Road	1.9511	21.8417	11.4981	0.0251		0.9446	0.9446		0.8694	0.8694		2,480.0824	2,480.0824	0.7810		2,499.6076
Total	1.9511	21.8417	11.4981	0.0251	6.8533	0.9446	7.7979	2.2353	0.8694	3.1047		2,480.0824	2,480.0824	0.7810		2,499.6076

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	10.6332	367.9567	79.4284	0.9721	21.4057	1.3886	22.7942	5.8664	1.3285	7.1949		106,020.4074	106,020.4074	9.3823		106,254.9655
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1631	0.1221	1.3648	4.0400e-003	0.3832	2.6300e-003	0.3858	0.1016	2.4200e-003	0.1040		402.1335	402.1335	0.0125		402.4461
Total	10.7962	368.0787	80.7932	0.9761	21.7888	1.3912	23.1801	5.9680	1.3309	7.2989		106,422.5409	106,422.5409	9.3948		106,657.4116

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0840	0.0000	3.0840	1.0059	0.0000	1.0059			0.0000			0.0000
Off-Road	0.6097	12.0537	13.9068	0.0251		0.5130	0.5130		0.5130	0.5130	0.0000	2,480.0824	2,480.0824	0.7810		2,499.6076
Total	0.6097	12.0537	13.9068	0.0251	3.0840	0.5130	3.5970	1.0059	0.5130	1.5188	0.0000	2,480.0824	2,480.0824	0.7810		2,499.6076

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	10.6332	367.9567	79.4284	0.9721	21.4057	1.3886	22.7942	5.8664	1.3285	7.1949		106,020.4074	106,020.4074	9.3823		106,254.9655
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1631	0.1221	1.3648	4.0400e-003	0.3832	2.6300e-003	0.3858	0.1016	2.4200e-003	0.1040		402.1335	402.1335	0.0125		402.4461
Total	10.7962	368.0787	80.7932	0.9761	21.7888	1.3912	23.1801	5.9680	1.3309	7.2989		106,422.5409	106,422.5409	9.3948		106,657.4116

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4476	11.8121	10.5446	0.0193		0.6395	0.6395		0.6055	0.6055		1,850.6229	1,850.6229	0.4817		1,862.6643
Total	1.4476	11.8121	10.5446	0.0193		0.6395	0.6395		0.6055	0.6055		1,850.6229	1,850.6229	0.4817		1,862.6643

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5018	9.9417	12.2216	0.0193		0.5532	0.5532		0.5532	0.5532	0.0000	1,850.6229	1,850.6229	0.4817		1,862.6643
Total	0.5018	9.9417	12.2216	0.0193		0.5532	0.5532		0.5532	0.5532	0.0000	1,850.6229	1,850.6229	0.4817		1,862.6643

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7950	7.4998	5.8450	9.4700e-003		0.4009	0.4009		0.3728	0.3728		914.8508	914.8508	0.2740		921.7000
Total	0.7950	7.4998	5.8450	9.4700e-003		0.4009	0.4009		0.3728	0.3728		914.8508	914.8508	0.2740		921.7000

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.6300e-003	0.2365	0.0609	5.1000e-004	0.0123	1.5700e-003	0.0138	3.5300e-003	1.5000e-003	5.0300e-003		54.6964	54.6964	4.3500e-003		54.8053
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0956	0.3016	0.7887	2.6600e-003	0.2166	2.9700e-003	0.2196	0.0577	2.7900e-003	0.0605		269.1676	269.1676	0.0110		269.4432

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	914.8508	914.8508	0.2740		921.7000
Total	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	914.8508	914.8508	0.2740		921.7000

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.6300e-003	0.2365	0.0609	5.1000e-004	0.0123	1.5700e-003	0.0138	3.5300e-003	1.5000e-003	5.0300e-003		54.6964	54.6964	4.3500e-003		54.8053
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0956	0.3016	0.7887	2.6600e-003	0.2166	2.9700e-003	0.2196	0.0577	2.7900e-003	0.0605		269.1676	269.1676	0.0110		269.4432

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7182	6.8670	5.7121	9.4700e-003		0.3501	0.3501		0.3256	0.3256		897.1864	897.1864	0.2720		903.9852
Total	0.7182	6.8670	5.7121	9.4700e-003		0.3501	0.3501		0.3256	0.3256		897.1864	897.1864	0.2720		903.9852

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0884	0.2746	0.7219	2.5900e-003	0.2166	2.3800e-003	0.2190	0.0577	2.2300e-003	0.0600		262.0422	262.0422	0.0102		262.2964

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	897.1864	897.1864	0.2720		903.9852
Total	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	897.1864	897.1864	0.2720		903.9852

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0884	0.2746	0.7219	2.5900e-003	0.2166	2.3800e-003	0.2190	0.0577	2.2300e-003	0.0600		262.0422	262.0422	0.0102		262.2964

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9483	8.5592	7.6169	0.0153		0.4368	0.4368		0.4115	0.4115		1,476.6296	1,476.6296	0.3947		1,486.4962
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9483	8.5592	7.6169	0.0153		0.4368	0.4368		0.4115	0.4115		1,476.6296	1,476.6296	0.3947		1,486.4962

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3597	7.4461	9.6102	0.0153		0.3970	0.3970		0.3970	0.3970	0.0000	1,476.6296	1,476.6296	0.3947		1,486.4962
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3597	7.4461	9.6102	0.0153		0.3970	0.3970		0.3970	0.3970	0.0000	1,476.6296	1,476.6296	0.3947		1,486.4962

Mission Trails Booster Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Mission Trails Booster Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Mission Trails Booster Station - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mission Trails Booster Station - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

Mission Trails Booster Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Unmitigated	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004
Total	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004

Mission Trails Booster Station - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Total	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Mission Trails Booster Station - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Mission Trails Booster Station
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.03	1000sqft	0.09	4,025.00	1

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information. For HRA vendor and haul truck trip length was assumed for onsite diesel emissions only.

On-road Fugitive Dust - CalEEMod Defaults.

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use represents grid supplied only. All other energy use emissions are calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Mission Trails Booster Station - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.83	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.21	2,484.47
tblEnergyUse	T24NG	4.31	0.00
tblGrading	AcresOfGrading	22.50	1.10
tblGrading	MaterialExported	0.00	700,000.00
tblGrading	MaterialImported	0.00	112,000.00
tblLandUse	LandUseSquareFeet	4,030.00	4,025.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

Mission Trails Booster Station - San Diego County APCD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching

Mission Trails Booster Station - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	1.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	5.00	0.29
tblTripsAndVMT	HaulingTripNumber	101,500.00	36,750.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	16.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00
tblVehicleTrips	CC_TL	6.60	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	6.60	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	14.70	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00

Mission Trails Booster Station - San Diego County APCD Air District, Winter

tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	931,937.50	10,400.00

2.0 Emissions Summary

Mission Trails Booster Station - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0964	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000	0.0000	9.4000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0964	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000	0.0000	5.0000e-004

Mission Trails Booster Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.02	0.00	41.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.45	45.45	0.00	0.00	46.81

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/9/2019	6/19/2019	5	30	
2	Trenching	Trenching	6/20/2019	8/28/2019	5	50	
3	Building Construction	Building Construction	8/29/2019	7/15/2020	5	230	
4	Paving	Paving	7/16/2020	7/22/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	0	4.00	81	0.73
Grading	Graders	1	4.00	187	0.41
Grading	Off-Highway Trucks	1	4.00	402	0.38
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Scrapers	1	4.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Concrete/Industrial Saws	1	4.00	81	0.73
Trenching	Excavators	1	4.00	158	0.38
Trenching	Off-Highway Trucks	1	4.00	402	0.38
Trenching	Rollers	1	4.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	4.00	97	0.37
Trenching	Welders	2	4.00	46	0.45
Building Construction	Aerial Lifts	2	4.00	63	0.31
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Rollers	1	4.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction	Welders	1	4.00	46	0.45
Paving	Cement and Mortar Mixers	0	4.00	9	0.56
Paving	Crushing/Proc. Equipment	1	4.00	85	0.78
Paving	Off-Highway Trucks	1	4.00	402	0.38
Paving	Pavers	1	4.00	130	0.42
Paving	Rollers	1	4.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	4.00	97	0.37

Trips and VMT

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	30.00	0.00	36,750.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	8	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	16.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.8533	0.0000	6.8533	2.2353	0.0000	2.2353			0.0000			0.0000
Off-Road	1.9511	21.8417	11.4981	0.0251		0.9446	0.9446		0.8694	0.8694		2,480.0824	2,480.0824	0.7810		2,499.6076
Total	1.9511	21.8417	11.4981	0.0251	6.8533	0.9446	7.7979	2.2353	0.8694	3.1047		2,480.0824	2,480.0824	0.7810		2,499.6076

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	10.9330	371.7275	85.1208	0.9557	21.4057	1.4210	22.8267	5.8664	1.3595	7.2259		104,236.330	104,236.330	9.7220		104,479.3827
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1887	0.1370	1.2632	3.7900e-003	0.3832	2.6300e-003	0.3858	0.1016	2.4200e-003	0.1040		377.3483	377.3483	0.0118		377.6420
Total	11.1217	371.8645	86.3839	0.9594	21.7888	1.4237	23.2125	5.9680	1.3620	7.3300		104,613.6813	104,613.6813	9.7337		104,857.0247

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.0840	0.0000	3.0840	1.0059	0.0000	1.0059			0.0000			0.0000
Off-Road	0.6097	12.0537	13.9068	0.0251		0.5130	0.5130		0.5130	0.5130	0.0000	2,480.0824	2,480.0824	0.7810		2,499.6076
Total	0.6097	12.0537	13.9068	0.0251	3.0840	0.5130	3.5970	1.0059	0.5130	1.5188	0.0000	2,480.0824	2,480.0824	0.7810		2,499.6076

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	10.9330	371.7275	85.1208	0.9557	21.4057	1.4210	22.8267	5.8664	1.3595	7.2259		104,236.330	104,236.330	9.7220		104,479.3827
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1887	0.1370	1.2632	3.7900e-003	0.3832	2.6300e-003	0.3858	0.1016	2.4200e-003	0.1040		377.3483	377.3483	0.0118		377.6420
Total	11.1217	371.8645	86.3839	0.9594	21.7888	1.4237	23.2125	5.9680	1.3620	7.3300		104,613.6813	104,613.6813	9.7337		104,857.0247

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4476	11.8121	10.5446	0.0193		0.6395	0.6395		0.6055	0.6055		1,850.6229	1,850.6229	0.4817		1,862.6643
Total	1.4476	11.8121	10.5446	0.0193		0.6395	0.6395		0.6055	0.6055		1,850.6229	1,850.6229	0.4817		1,862.6643

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5018	9.9417	12.2216	0.0193		0.5532	0.5532		0.5532	0.5532	0.0000	1,850.6229	1,850.6229	0.4817		1,862.6643
Total	0.5018	9.9417	12.2216	0.0193		0.5532	0.5532		0.5532	0.5532	0.0000	1,850.6229	1,850.6229	0.4817		1,862.6643

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7950	7.4998	5.8450	9.4700e-003		0.4009	0.4009		0.3728	0.3728		914.8508	914.8508	0.2740		921.7000
Total	0.7950	7.4998	5.8450	9.4700e-003		0.4009	0.4009		0.3728	0.3728		914.8508	914.8508	0.2740		921.7000

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.0200e-003	0.2363	0.0679	5.0000e-004	0.0123	1.6000e-003	0.0139	3.5300e-003	1.5300e-003	5.0600e-003		53.1931	53.1931	4.6500e-003		53.3093
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1097	0.3094	0.7415	2.5200e-003	0.2166	3.0000e-003	0.2196	0.0577	2.8200e-003	0.0606		254.4455	254.4455	0.0109		254.7183

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	914.8508	914.8508	0.2740		921.7000
Total	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	914.8508	914.8508	0.2740		921.7000

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.0200e-003	0.2363	0.0679	5.0000e-004	0.0123	1.6000e-003	0.0139	3.5300e-003	1.5300e-003	5.0600e-003		53.1931	53.1931	4.6500e-003		53.3093
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1097	0.3094	0.7415	2.5200e-003	0.2166	3.0000e-003	0.2196	0.0577	2.8200e-003	0.0606		254.4455	254.4455	0.0109		254.7183

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7182	6.8670	5.7121	9.4700e-003		0.3501	0.3501		0.3256	0.3256		897.1864	897.1864	0.2720		903.9852
Total	0.7182	6.8670	5.7121	9.4700e-003		0.3501	0.3501		0.3256	0.3256		897.1864	897.1864	0.2720		903.9852

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.1017	0.2812	0.6772	2.4500e-003	0.2166	2.4100e-003	0.2190	0.0577	2.2500e-003	0.0600		247.7223	247.7223	0.0101		247.9739

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	897.1864	897.1864	0.2720		903.9852
Total	0.2542	5.1914	6.3026	9.4700e-003		0.3116	0.3116		0.3116	0.3116	0.0000	897.1864	897.1864	0.2720		903.9852

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.1017	0.2812	0.6772	2.4500e-003	0.2166	2.4100e-003	0.2190	0.0577	2.2500e-003	0.0600		247.7223	247.7223	0.0101		247.9739

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9483	8.5592	7.6169	0.0153		0.4368	0.4368		0.4115	0.4115		1,476.6296	1,476.6296	0.3947		1,486.4962
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9483	8.5592	7.6169	0.0153		0.4368	0.4368		0.4115	0.4115		1,476.6296	1,476.6296	0.3947		1,486.4962

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3597	7.4461	9.6102	0.0153		0.3970	0.3970		0.3970	0.3970	0.0000	1,476.6296	1,476.6296	0.3947		1,486.4962
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.3597	7.4461	9.6102	0.0153		0.3970	0.3970		0.3970	0.3970	0.0000	1,476.6296	1,476.6296	0.3947		1,486.4962

Mission Trails Booster Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Mission Trails Booster Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Mission Trails Booster Station - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mission Trails Booster Station - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Mission Trails Booster Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Unmitigated	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0000e-005	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004
Total	0.0964	0.0000	4.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		8.8000e-004	8.8000e-004	0.0000		9.4000e-004

Mission Trails Booster Station - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0861					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004
Total	0.0964	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.8000e-004	4.8000e-004	0.0000		5.0000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Mission Trails Booster Station - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pump Station - San Diego County APCD Air District, Annual

Morena Pump Station
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

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Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Morena Pump Station - San Diego County APCD Air District, Annual

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

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tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

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tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1371	1.2442	0.9792	1.9300e-003	0.0160	0.0598	0.0759	4.3000e-003	0.0566	0.0609	0.0000	169.0148	169.0148	0.0357	0.0000	169.9083
2020	0.1264	0.8404	0.6975	1.3200e-003	9.3800e-003	0.0425	0.0519	2.5100e-003	0.0406	0.0431	0.0000	112.4960	112.4960	0.0217	0.0000	113.0380
Maximum	0.1371	1.2442	0.9792	1.9300e-003	0.0160	0.0598	0.0759	4.3000e-003	0.0566	0.0609	0.0000	169.0148	169.0148	0.0357	0.0000	169.9083

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0437	0.7844	1.0236	1.9300e-003	0.0160	0.0381	0.0541	4.3000e-003	0.0380	0.0424	0.0000	169.0147	169.0147	0.0357	0.0000	169.9082
2020	0.0617	0.6049	0.7500	1.3200e-003	9.3800e-003	0.0346	0.0439	2.5100e-003	0.0345	0.0371	0.0000	112.4958	112.4958	0.0217	0.0000	113.0379
Maximum	0.0617	0.7844	1.0236	1.9300e-003	0.0160	0.0381	0.0541	4.3000e-003	0.0380	0.0424	0.0000	169.0147	169.0147	0.0357	0.0000	169.9082

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	59.98	33.36	-5.78	0.00	0.00	29.06	23.28	0.00	25.34	23.68	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-2-2019	7-1-2019	0.5715	0.2898
2	7-2-2019	10-1-2019	0.2966	0.2184
3	10-2-2019	1-1-2020	0.5148	0.3207
4	1-2-2020	4-1-2020	0.4793	0.3231
5	4-2-2020	7-1-2020	0.4463	0.3115
6	7-2-2020	9-30-2020	0.0363	0.0280
		Highest	0.5715	0.3231

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0265	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0265	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-004	5.8900e-003	6.4100e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954
Total	0.0290	5.8900e-003	6.4100e-003	1.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954

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3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508
Total	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1000e-004	4.7500e-003	6.4100e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954
Total	0.0283	4.7500e-003	6.4100e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.8936	0.8936	7.0000e-005	0.0000	0.8954

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3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508
Total	3.0000e-005	2.0000e-005	1.9000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.0507	0.0507	0.0000	0.0000	0.0508

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0502	0.4307	0.3193	5.7000e-004		0.0232	0.0232		0.0222	0.0222	0.0000	48.5536	48.5536	9.9100e-003	0.0000	48.8012
Total	0.0502	0.4307	0.3193	5.7000e-004		0.0232	0.0232		0.0222	0.0222	0.0000	48.5536	48.5536	9.9100e-003	0.0000	48.8012

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	7.6600e-003	2.0600e-003	2.0000e-005	4.0000e-004	5.0000e-005	4.6000e-004	1.2000e-004	5.0000e-005	1.7000e-004	0.0000	1.6206	1.6206	1.3000e-004	0.0000	1.6239
Worker	1.9200e-003	1.4800e-003	0.0143	4.0000e-005	3.9100e-003	3.0000e-005	3.9400e-003	1.0400e-003	3.0000e-005	1.0700e-003	0.0000	3.6527	3.6527	1.2000e-004	0.0000	3.6556
Total	2.2100e-003	9.1400e-003	0.0163	6.0000e-005	4.3100e-003	8.0000e-005	4.4000e-003	1.1600e-003	8.0000e-005	1.2400e-003	0.0000	5.2733	5.2733	2.5000e-004	0.0000	5.2795

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.2789	0.3336	5.7000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	48.5535	48.5535	9.9100e-003	0.0000	48.8012
Total	0.0138	0.2789	0.3336	5.7000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	48.5535	48.5535	9.9100e-003	0.0000	48.8012

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9000e-004	7.6600e-003	2.0600e-003	2.0000e-005	4.0000e-004	5.0000e-005	4.6000e-004	1.2000e-004	5.0000e-005	1.7000e-004	0.0000	1.6206	1.6206	1.3000e-004	0.0000	1.6239
Worker	1.9200e-003	1.4800e-003	0.0143	4.0000e-005	3.9100e-003	3.0000e-005	3.9400e-003	1.0400e-003	3.0000e-005	1.0700e-003	0.0000	3.6527	3.6527	1.2000e-004	0.0000	3.6556
Total	2.2100e-003	9.1400e-003	0.0163	6.0000e-005	4.3100e-003	8.0000e-005	4.4000e-003	1.1600e-003	8.0000e-005	1.2400e-003	0.0000	5.2733	5.2733	2.5000e-004	0.0000	5.2795

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0882	0.7688	0.6075	1.1100e-003		0.0394	0.0394		0.0377	0.0377	0.0000	93.6891	93.6891	0.0189	0.0000	94.1609
Total	0.0882	0.7688	0.6075	1.1100e-003		0.0394	0.0394		0.0377	0.0377	0.0000	93.6891	93.6891	0.0189	0.0000	94.1609

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0136	3.6000e-003	3.0000e-005	7.9000e-004	7.0000e-005	8.6000e-004	2.3000e-004	6.0000e-005	2.9000e-004	0.0000	3.1400	3.1400	2.4000e-004	0.0000	3.1460
Worker	3.5100e-003	2.6000e-003	0.0255	8.0000e-005	7.6300e-003	5.0000e-005	7.6900e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.9008	6.9008	2.1000e-004	0.0000	6.9060
Total	3.9600e-003	0.0162	0.0291	1.1000e-004	8.4200e-003	1.2000e-004	8.5500e-003	2.2600e-003	1.1000e-004	2.3700e-003	0.0000	10.0408	10.0408	4.5000e-004	0.0000	10.0520

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0270	0.5441	0.6508	1.1100e-003		0.0320	0.0320		0.0320	0.0320	0.0000	93.6890	93.6890	0.0189	0.0000	94.1607
Total	0.0270	0.5441	0.6508	1.1100e-003		0.0320	0.0320		0.0320	0.0320	0.0000	93.6890	93.6890	0.0189	0.0000	94.1607

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0136	3.6000e-003	3.0000e-005	7.9000e-004	7.0000e-005	8.6000e-004	2.3000e-004	6.0000e-005	2.9000e-004	0.0000	3.1400	3.1400	2.4000e-004	0.0000	3.1460
Worker	3.5100e-003	2.6000e-003	0.0255	8.0000e-005	7.6300e-003	5.0000e-005	7.6900e-003	2.0300e-003	5.0000e-005	2.0800e-003	0.0000	6.9008	6.9008	2.1000e-004	0.0000	6.9060
Total	3.9600e-003	0.0162	0.0291	1.1000e-004	8.4200e-003	1.2000e-004	8.5500e-003	2.2600e-003	1.1000e-004	2.3700e-003	0.0000	10.0408	10.0408	4.5000e-004	0.0000	10.0520

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0451	0.4340	0.2648	4.8000e-004		0.0221	0.0221		0.0209	0.0209	0.0000	42.3268	42.3268	9.9000e-003	0.0000	42.5742
Total	0.0451	0.4340	0.2648	4.8000e-004		0.0221	0.0221		0.0209	0.0209	0.0000	42.3268	42.3268	9.9000e-003	0.0000	42.5742

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3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597
Total	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0104	0.2108	0.2774	4.8000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	42.3267	42.3267	9.9000e-003	0.0000	42.5741
Total	0.0104	0.2108	0.2774	4.8000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	42.3267	42.3267	9.9000e-003	0.0000	42.5741

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3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597
Total	1.2400e-003	9.5000e-004	9.2200e-003	3.0000e-005	2.5300e-003	2.0000e-005	2.5400e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.3578	2.3578	8.0000e-005	0.0000	2.3597

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0337	0.3059	0.3352	5.8000e-004		0.0141	0.0141		0.0132	0.0132	0.0000	49.5224	49.5224	0.0140	0.0000	49.8731
Total	0.0337	0.3059	0.3352	5.8000e-004		0.0141	0.0141		0.0132	0.0132	0.0000	49.5224	49.5224	0.0140	0.0000	49.8731

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3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7600e-003	0.0613	0.0134	1.6000e-004	3.4200e-003	2.3000e-004	3.6500e-003	9.4000e-004	2.2000e-004	1.1600e-003	0.0000	15.5919	15.5919	1.4100e-003	0.0000	15.6272
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.1800e-003	0.0211	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3892	5.3892	1.7000e-004	0.0000	5.3935
Total	4.6000e-003	0.0635	0.0344	2.2000e-004	9.1900e-003	2.7000e-004	9.4700e-003	2.4700e-003	2.6000e-004	2.7300e-003	0.0000	20.9811	20.9811	1.5800e-003	0.0000	21.0207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.2211	0.3526	5.8000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	49.5223	49.5223	0.0140	0.0000	49.8731
Total	0.0114	0.2211	0.3526	5.8000e-004		0.0107	0.0107		0.0107	0.0107	0.0000	49.5223	49.5223	0.0140	0.0000	49.8731

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3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7600e-003	0.0613	0.0134	1.6000e-004	3.4200e-003	2.3000e-004	3.6500e-003	9.4000e-004	2.2000e-004	1.1600e-003	0.0000	15.5919	15.5919	1.4100e-003	0.0000	15.6272
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8400e-003	2.1800e-003	0.0211	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3892	5.3892	1.7000e-004	0.0000	5.3935
Total	4.6000e-003	0.0635	0.0344	2.2000e-004	9.1900e-003	2.7000e-004	9.4700e-003	2.4700e-003	2.6000e-004	2.7300e-003	0.0000	20.9811	20.9811	1.5800e-003	0.0000	21.0207

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.7500e-003	0.0492	0.0513	8.0000e-005		2.6300e-003	2.6300e-003		2.4200e-003	2.4200e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.7500e-003	0.0492	0.0513	8.0000e-005		2.6300e-003	2.6300e-003		2.4200e-003	2.4200e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125
Total	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.9600e-003	0.0395	0.0605	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.9600e-003	0.0395	0.0605	8.0000e-005		2.1300e-003	2.1300e-003		2.1300e-003	2.1300e-003	0.0000	7.0099	7.0099	2.2700e-003	0.0000	7.0666

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125
Total	4.1000e-004	3.1000e-004	3.0000e-003	1.0000e-005	9.0000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8119	0.8119	2.0000e-005	0.0000	0.8125

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pump Station - San Diego County APCD Air District, Annual

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Morena Pump Station - San Diego County APCD Air District, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Unmitigated	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004
Total	0.0265	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1000e-004	1.1000e-004	0.0000	0.0000	1.2000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

Morena Pump Station - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

Morena Pump Station - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Morena Pump Station - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pump Station - San Diego County APCD Air District, Summer

Morena Pump Station
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Morena Pump Station - San Diego County APCD Air District, Summer

Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Morena Pump Station - San Diego County APCD Air District, Summer

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Morena Pump Station - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Morena Pump Station - San Diego County APCD Air District, Summer

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

Morena Pump Station - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

Morena Pump Station - San Diego County APCD Air District, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.0607	19.3276	12.2006	0.0227	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014
2020	8.2879	13.1865	10.7210	0.0206	0.1450	0.6638	0.8088	0.0388	0.6354	0.6742	0.0000	1,929.3539	1,929.3539	0.3610	0.0000	1,938.3032
Maximum	8.2879	19.3276	12.2006	0.0227	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5260	9.4366	12.7600	0.0227	0.2091	0.5397	0.6847	0.0561	0.5396	0.5783	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014
2020	8.1052	9.4098	11.4486	0.0206	0.1450	0.5391	0.6841	0.0388	0.5390	0.5777	0.0000	1,929.3539	1,929.3539	0.3610	0.0000	1,938.3032
Maximum	8.1052	9.4366	12.7600	0.0227	0.2091	0.5397	0.6847	0.0561	0.5396	0.5783	0.0000	2,195.4840	2,195.4840	0.4887	0.0000	2,207.7014

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	16.60	42.04	-5.61	0.00	0.00	34.56	28.29	0.00	30.98	29.16	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pump Station - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Morena Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	8.2806	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675
Total	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	8.0978	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675
Total	7.3400e-003	4.9400e-003	0.0567	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		16.8549	16.8549	5.0000e-004		16.8675

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428
Total	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0720	0.2918	0.5591	1.9500e-003	0.1450	2.6700e-003	0.1476	0.0388	2.5100e-003	0.0413		198.4353	198.4353	9.0200e-003		198.6607

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466
Total	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0662	0.2651	0.5110	1.9000e-003	0.1450	2.0200e-003	0.1470	0.0388	1.9100e-003	0.0407		193.6476	193.6476	8.3700e-003		193.8567

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761
Total	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761
Total	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0386	1.3350	0.2882	3.5300e-003	0.0777	5.0400e-003	0.0827	0.0213	4.8200e-003	0.0261		384.6545	384.6545	0.0340		385.5055
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1014	1.3788	0.7832	4.9300e-003	0.2091	5.9800e-003	0.2151	0.0561	5.6800e-003	0.0618		523.8865	523.8865	0.0385		524.8486

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0386	1.3350	0.2882	3.5300e-003	0.0777	5.0400e-003	0.0827	0.0213	4.8200e-003	0.0261		384.6545	384.6545	0.0340		385.5055
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1014	1.3788	0.7832	4.9300e-003	0.2091	5.9800e-003	0.2151	0.0561	5.6800e-003	0.0618		523.8865	523.8865	0.0385		524.8486

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402
Total	0.0587	0.0396	0.4535	1.3500e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		134.8395	134.8395	4.0300e-003		134.9402

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pump Station - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pump Station - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Morena Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Unmitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pump Station - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Morena Pump Station - San Diego County APCD Air District, Winter

Morena Pump Station
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.07	1000sqft	0.14	6,070.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Morena Pump Station - San Diego County APCD Air District, Winter

Grading -
Demolition -

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No operational trips.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation rate of 4.46 lb/person/day.

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF -

Stationary Sources - Process Boilers -

Stationary Sources - Process Boilers EF -

Stationary Sources - User Defined -

Land Use Change -

Sequestration -

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Morena Pump Station - San Diego County APCD Air District, Winter

Energy Mitigation -

Water Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Morena Pump Station - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	180.00
tblConstructionPhase	NumDays	10.00	45.00
tblConstructionPhase	NumDays	2.00	90.00
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	PhaseEndDate	4/1/2019	6/24/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/15/2020
tblConstructionPhase	PhaseEndDate	4/1/2019	6/3/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	10/7/2019
tblConstructionPhase	PhaseEndDate	4/1/2019	7/14/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	6/16/2020
tblConstructionPhase	PhaseStartDate	4/2/2019	10/8/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/4/2019
tblConstructionPhase	PhaseStartDate	4/2/2019	6/25/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00

Morena Pump Station - San Diego County APCD Air District, Winter

tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading

Morena Pump Station - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	7.53	0.29
tblTripsAndVMT	HaulingTripNumber	0.00	400.00
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	3.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	8.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,403,687.50	10,400.00

Morena Pump Station - San Diego County APCD Air District, Winter

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.0679	19.3323	12.1768	0.0226	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363
2020	8.2889	13.1911	10.7013	0.0205	0.1450	0.6639	0.8088	0.0388	0.6355	0.6742	0.0000	1,919.5799	1,919.5799	0.3608	0.0000	1,928.5306
Maximum	8.2889	19.3323	12.1768	0.0226	0.2091	0.9848	1.0998	0.0561	0.9272	0.9577	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.5346	9.4422	12.7362	0.0226	0.2091	0.5397	0.6847	0.0561	0.5396	0.5784	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363
2020	8.1062	9.4145	11.4289	0.0205	0.1450	0.5391	0.6841	0.0388	0.5390	0.5777	0.0000	1,919.5799	1,919.5799	0.3608	0.0000	1,928.5306
Maximum	8.1062	9.4422	12.7362	0.0226	0.2091	0.5397	0.6847	0.0561	0.5396	0.5784	0.0000	2,188.0239	2,188.0239	0.4885	0.0000	2,200.2363

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	16.57	42.02	-5.63	0.00	0.00	34.56	28.28	0.00	30.98	29.16	0.00	0.00	0.00	0.00	0.00	0.00

Morena Pump Station - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1454	1.0000e-005	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000	0.0000	1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/16/2020	6/24/2020	5	7	
2	Building Construction	Building Construction	10/8/2019	6/15/2020	5	180	
3	Demolition	Demolition	4/2/2019	6/3/2019	5	45	
4	Grading	Grading	6/4/2019	10/7/2019	5	90	
5	Paving	Paving	6/25/2020	7/14/2020	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 9,105; Non-Residential Outdoor: 3,035; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Morena Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
	Cranes	1	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Grading	Plate Compactors	2	8.00	8	0.43

Trips and VMT

Morena Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	16.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	16.00	0.00	400.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Water Exposed Area
- Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	8.2806	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346
Total	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	8.0384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	8.0978	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

Morena Pump Station - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346
Total	8.3100e-003	5.5500e-003	0.0535	1.6000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4600e-003		15.8226	15.8226	4.8000e-004		15.8346

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428
Total	1.6468	14.1218	10.4681	0.0187		0.7603	0.7603		0.7277	0.7277		1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,754.7919	1,754.7919	0.3580		1,763.7428

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0807	0.2974	0.5388	1.8500e-003	0.1450	2.7000e-003	0.1477	0.0388	2.5400e-003	0.0413		188.4063	188.4063	9.0800e-003		188.6333

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466
Total	1.4831	12.9214	10.2100	0.0187		0.6618	0.6618		0.6335	0.6335		1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466
Total	0.4539	9.1447	10.9376	0.0187		0.5371	0.5371		0.5371	0.5371	0.0000	1,735.7064	1,735.7064	0.3496		1,744.4466

Morena Pump Station - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0743	0.2698	0.4914	1.8000e-003	0.1450	2.0400e-003	0.1470	0.0388	1.9300e-003	0.0407		183.8736	183.8736	8.4200e-003		184.0841

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761
Total	2.0057	19.2892	11.7675	0.0215		0.9840	0.9840		0.9265	0.9265		2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761
Total	0.4620	9.3691	12.3268	0.0215		0.4728	0.4728		0.4728	0.4728	0.0000	2,073.6560	2,073.6560	0.4848		2,085.7761

Morena Pump Station - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.7488	6.7973	7.4490	0.0128		0.3140	0.3140		0.2933	0.2933		1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.3487	0.3088	3.4700e-003	0.0777	5.1600e-003	0.0828	0.0213	4.9300e-003	0.0262		378.1817	378.1817	0.0353		379.0635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1107	1.3979	0.7767	4.7800e-003	0.2091	6.1000e-003	0.2152	0.0561	5.7900e-003	0.0620		508.8879	508.8879	0.0395		509.8752

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823
Total	0.2541	4.9134	7.8360	0.0128		0.2372	0.2372		0.2372	0.2372	0.0000	1,213.0906	1,213.0906	0.3437		1,221.6823

Morena Pump Station - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0397	1.3487	0.3088	3.4700e-003	0.0777	5.1600e-003	0.0828	0.0213	4.9300e-003	0.0262		378.1817	378.1817	0.0353		379.0635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1107	1.3979	0.7767	4.7800e-003	0.2091	6.1000e-003	0.2152	0.0561	5.7900e-003	0.0620		508.8879	508.8879	0.0395		509.8752

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	5.6476	8.6478	0.0114		0.3047	0.3047		0.3047	0.3047	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Morena Pump Station - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764
Total	0.0665	0.0444	0.4276	1.2700e-003	0.1314	9.2000e-004	0.1324	0.0349	8.5000e-004	0.0357		126.5811	126.5811	3.8100e-003		126.6764

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

Morena Pump Station - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

Morena Pump Station - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Morena Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Unmitigated	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

Morena Pump Station - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1299					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003
Total	0.1454	1.0000e-005	6.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3300e-003	1.3300e-003	0.0000		1.4200e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Morena Pump Station - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Annual

NCPWF IPS
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Annual

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

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tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

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tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

NCPWF IPS - San Diego County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-7-2019	4-6-2019	0.6405	0.4921
2	4-7-2019	7-6-2019	0.5789	0.4506
3	7-7-2019	10-6-2019	0.6442	0.4735
4	10-7-2019	1-6-2020	0.6432	0.4750
5	1-7-2020	4-6-2020	0.5838	0.4524
6	4-7-2020	7-6-2020	0.5667	0.4433
7	7-7-2020	9-30-2020	0.2885	0.2163
		Highest	0.6442	0.4921

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0293	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1066	3.8200e-003	1.0000e-005	0.2045

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0293	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1066	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

NCPWF IPS - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF IPS - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

NCPWF IPS - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-003	0.0118	0.0128	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907
Total	0.0328	0.0118	0.0128	2.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907

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3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0311					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2000e-004	9.5000e-003	0.0128	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907
Total	0.0315	9.5000e-003	0.0128	2.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004	0.0000	1.7873	1.7873	1.4000e-004	0.0000	1.7907

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3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1312	1.1310	0.8527	1.4600e-003		0.0644	0.0644		0.0612	0.0612	0.0000	125.0281	125.0281	0.0271	0.0000	125.7062
Total	0.1312	1.1310	0.8527	1.4600e-003		0.0644	0.0644		0.0612	0.0612	0.0000	125.0281	125.0281	0.0271	0.0000	125.7062

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9500e-003	0.0523	0.0141	1.1000e-004	2.7700e-003	3.6000e-004	3.1300e-003	8.0000e-004	3.5000e-004	1.1500e-003	0.0000	11.0788	11.0788	8.9000e-004	0.0000	11.1010
Worker	0.0274	0.0210	0.2034	5.8000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.7000e-004	0.0152	0.0000	52.0205	52.0205	1.6700e-003	0.0000	52.0623
Total	0.0294	0.0734	0.2174	6.9000e-004	0.0585	7.7000e-004	0.0593	0.0156	7.2000e-004	0.0163	0.0000	63.0993	63.0993	2.5600e-003	0.0000	63.1633

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0607	0.8406	0.9002	1.4600e-003		0.0517	0.0517		0.0501	0.0501	0.0000	125.0279	125.0279	0.0271	0.0000	125.7061
Total	0.0607	0.8406	0.9002	1.4600e-003		0.0517	0.0517		0.0501	0.0501	0.0000	125.0279	125.0279	0.0271	0.0000	125.7061

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9500e-003	0.0523	0.0141	1.1000e-004	2.7700e-003	3.6000e-004	3.1300e-003	8.0000e-004	3.5000e-004	1.1500e-003	0.0000	11.0788	11.0788	8.9000e-004	0.0000	11.1010
Worker	0.0274	0.0210	0.2034	5.8000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.7000e-004	0.0152	0.0000	52.0205	52.0205	1.6700e-003	0.0000	52.0623
Total	0.0294	0.0734	0.2174	6.9000e-004	0.0585	7.7000e-004	0.0593	0.0156	7.2000e-004	0.0163	0.0000	63.0993	63.0993	2.5600e-003	0.0000	63.1633

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1029	0.9000	0.7254	1.2700e-003		0.0488	0.0488		0.0464	0.0464	0.0000	107.5175	107.5175	0.0232	0.0000	108.0963
Total	0.1029	0.9000	0.7254	1.2700e-003		0.0488	0.0488		0.0464	0.0464	0.0000	107.5175	107.5175	0.0232	0.0000	108.0963

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0414	0.0110	1.0000e-004	2.4100e-003	2.0000e-004	2.6100e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.5782	9.5782	7.3000e-004	0.0000	9.5965
Worker	0.0223	0.0165	0.1619	4.9000e-004	0.0485	3.5000e-004	0.0489	0.0129	3.2000e-004	0.0132	0.0000	43.8550	43.8550	1.3200e-003	0.0000	43.8879
Total	0.0237	0.0579	0.1729	5.9000e-004	0.0509	5.5000e-004	0.0515	0.0136	5.1000e-004	0.0141	0.0000	53.4331	53.4331	2.0500e-003	0.0000	53.4844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0502	0.7081	0.7812	1.2700e-003		0.0426	0.0426		0.0413	0.0413	0.0000	107.5174	107.5174	0.0232	0.0000	108.0962
Total	0.0502	0.7081	0.7812	1.2700e-003		0.0426	0.0426		0.0413	0.0413	0.0000	107.5174	107.5174	0.0232	0.0000	108.0962

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3800e-003	0.0414	0.0110	1.0000e-004	2.4100e-003	2.0000e-004	2.6100e-003	7.0000e-004	1.9000e-004	8.9000e-004	0.0000	9.5782	9.5782	7.3000e-004	0.0000	9.5965
Worker	0.0223	0.0165	0.1619	4.9000e-004	0.0485	3.5000e-004	0.0489	0.0129	3.2000e-004	0.0132	0.0000	43.8550	43.8550	1.3200e-003	0.0000	43.8879
Total	0.0237	0.0579	0.1729	5.9000e-004	0.0509	5.5000e-004	0.0515	0.0136	5.1000e-004	0.0141	0.0000	53.4331	53.4331	2.0500e-003	0.0000	53.4844

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0247	0.2394	0.1598	2.7000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969
Total	0.0247	0.2394	0.1598	2.7000e-004		0.0128	0.0128		0.0120	0.0120	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969

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3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0148	0.1797	0.1637	2.7000e-004		9.7700e-003	9.7700e-003		9.3600e-003	9.3600e-003	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969
Total	0.0148	0.1797	0.1637	2.7000e-004		9.7700e-003	9.7700e-003		9.3600e-003	9.3600e-003	0.0000	24.1467	24.1467	6.0100e-003	0.0000	24.2969

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3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0367	0.0000	0.0367	0.0201	0.0000	0.0201	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0827	0.7483	0.7359	1.2000e-003		0.0413	0.0413		0.0391	0.0391	0.0000	104.6221	104.6221	0.0249	0.0000	105.2451
Total	0.0827	0.7483	0.7359	1.2000e-003	0.0367	0.0413	0.0781	0.0201	0.0391	0.0592	0.0000	104.6221	104.6221	0.0249	0.0000	105.2451

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3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.6500e-003	2.1100e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4557	2.4557	2.2000e-004	0.0000	2.4613
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.4700e-003	0.0142	4.0000e-005	3.8900e-003	3.0000e-005	3.9200e-003	1.0300e-003	3.0000e-005	1.0600e-003	0.0000	3.6302	3.6302	1.2000e-004	0.0000	3.6331
Total	2.1900e-003	0.0111	0.0163	6.0000e-005	4.4300e-003	7.0000e-005	4.5000e-003	1.1800e-003	6.0000e-005	1.2400e-003	0.0000	6.0859	6.0859	3.4000e-004	0.0000	6.0944

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0165	0.0000	0.0165	9.0400e-003	0.0000	9.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0458	0.6077	0.7600	1.2000e-003		0.0352	0.0352		0.0343	0.0343	0.0000	104.6220	104.6220	0.0249	0.0000	105.2450
Total	0.0458	0.6077	0.7600	1.2000e-003	0.0165	0.0352	0.0517	9.0400e-003	0.0343	0.0433	0.0000	104.6220	104.6220	0.0249	0.0000	105.2450

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3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.8000e-004	9.6500e-003	2.1100e-003	2.0000e-005	5.4000e-004	4.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4557	2.4557	2.2000e-004	0.0000	2.4613
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9100e-003	1.4700e-003	0.0142	4.0000e-005	3.8900e-003	3.0000e-005	3.9200e-003	1.0300e-003	3.0000e-005	1.0600e-003	0.0000	3.6302	3.6302	1.2000e-004	0.0000	3.6331
Total	2.1900e-003	0.0111	0.0163	6.0000e-005	4.4300e-003	7.0000e-005	4.5000e-003	1.1800e-003	6.0000e-005	1.2400e-003	0.0000	6.0859	6.0859	3.4000e-004	0.0000	6.0944

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0362	0.3321	0.3185	5.2000e-004		0.0179	0.0179		0.0166	0.0166	0.0000	43.0006	43.0006	0.0122	0.0000	43.3061
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0362	0.3321	0.3185	5.2000e-004		0.0179	0.0179		0.0166	0.0166	0.0000	43.0006	43.0006	0.0122	0.0000	43.3061

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3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230
Total	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0194	0.2551	0.3316	5.2000e-004		0.0144	0.0144		0.0141	0.0141	0.0000	43.0005	43.0005	0.0122	0.0000	43.3061
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0194	0.2551	0.3316	5.2000e-004		0.0144	0.0144		0.0141	0.0141	0.0000	43.0005	43.0005	0.0122	0.0000	43.3061

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3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230
Total	2.6500e-003	1.9600e-003	0.0193	6.0000e-005	5.7700e-003	4.0000e-005	5.8200e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.2191	5.2191	1.6000e-004	0.0000	5.2230

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Unmitigated	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.1100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004
Total	0.0293	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	0.0000	1.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Summer

NCPWF IPS
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Summer

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

NCPWF IPS - San Diego County APCD Air District, Summer

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

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tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

NCPWF IPS - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF IPS - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

NCPWF IPS - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	4.6785	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026
Total	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	4.4958	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Summer

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026
Total	0.0220	0.0148	0.1701	5.1000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		50.5648	50.5648	1.5100e-003		50.6026

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754
Total	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.7439	0.1921	1.6600e-003	0.0406	5.1800e-003	0.0458	0.0117	4.9500e-003	0.0166		177.6100	177.6100	0.0137		177.9528
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4203	1.0180	3.2862	0.0104	0.8621	0.0110	0.8731	0.2296	0.0104	0.2399		1,047.8096	1,047.8096	0.0415		1,048.8471

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754
Total	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0276	0.7439	0.1921	1.6600e-003	0.0406	5.1800e-003	0.0458	0.0117	4.9500e-003	0.0166		177.6100	177.6100	0.0137		177.9528
Worker	0.3927	0.2740	3.0941	8.7400e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		870.1996	870.1996	0.0278		870.8943
Total	0.4203	1.0180	3.2862	0.0104	0.8621	0.0110	0.8731	0.2296	0.0104	0.2399		1,047.8096	1,047.8096	0.0415		1,048.8471

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173
Total	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.3670	0.2472	2.8346	8.4600e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		842.7471	842.7471	0.0252		843.3762
Total	0.3894	0.9238	3.0070	0.0101	0.8621	9.0700e-003	0.8712	0.2296	8.4800e-003	0.2381		1,019.1711	1,019.1711	0.0382		1,020.1256

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173
Total	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0224	0.6766	0.1724	1.6400e-003	0.0406	3.3100e-003	0.0439	0.0117	3.1700e-003	0.0149		176.4241	176.4241	0.0130		176.7494
Worker	0.3670	0.2472	2.8346	8.4600e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		842.7471	842.7471	0.0252		843.3762
Total	0.3894	0.9238	3.0070	0.0101	0.8621	9.0700e-003	0.8712	0.2296	8.4800e-003	0.2381		1,019.1711	1,019.1711	0.0382		1,020.1256

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378
Total	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378
Total	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Summer

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7574	0.0000	0.7574	0.4143	0.0000	0.4143			0.0000			0.0000
Off-Road	1.7044	15.4281	15.1734	0.0248		0.8524	0.8524		0.8070	0.8070		2,377.8589	2,377.8589	0.5664		2,392.0187
Total	1.7044	15.4281	15.1734	0.0248	0.7574	0.8524	1.6098	0.4143	0.8070	1.2213		2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6400e-003	0.1951	0.0421	5.2000e-004	0.0114	7.4000e-004	0.0121	3.1100e-003	7.0000e-004	3.8100e-003		56.2111	56.2111	4.9700e-003		56.3355
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0449	0.2225	0.3515	1.3900e-003	0.0935	1.3300e-003	0.0948	0.0249	1.2400e-003	0.0261		143.2311	143.2311	7.7500e-003		143.4249

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3408	0.0000	0.3408	0.1865	0.0000	0.1865			0.0000			0.0000
Off-Road	0.9445	12.5296	15.6700	0.0248		0.7254	0.7254		0.7067	0.7067	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187
Total	0.9445	12.5296	15.6700	0.0248	0.3408	0.7254	1.0662	0.1865	0.7067	0.8932	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Summer

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6400e-003	0.1951	0.0421	5.2000e-004	0.0114	7.4000e-004	0.0121	3.1100e-003	7.0000e-004	3.8100e-003		56.2111	56.2111	4.9700e-003		56.3355
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0393	0.0274	0.3094	8.7000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		87.0200	87.0200	2.7800e-003		87.0894
Total	0.0449	0.2225	0.3515	1.3900e-003	0.0935	1.3300e-003	0.0948	0.0249	1.2400e-003	0.0261		143.2311	143.2311	7.7500e-003		143.4249

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Summer

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

NCPWF IPS - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF IPS - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCPWF IPS - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Unmitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF IPS - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF IPS - San Diego County APCD Air District, Winter

NCPWF IPS

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	6.70	1000sqft	0.15	6,700.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

NCPWF IPS - San Diego County APCD Air District, Winter

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Grading - See Section 7.2.1 for Construction Details.

Demolition - No demolition of structures anticipated.

Trips and VMT - See Section 7.2.1 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - No mobile source emissions.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment will be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

NCPWF IPS - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	14.00
tblConstructionPhase	NumDays	100.00	260.00
tblConstructionPhase	NumDays	10.00	21.00
tblConstructionPhase	NumDays	2.00	97.00
tblConstructionPhase	NumDays	5.00	80.00
tblConstructionPhase	PhaseEndDate	1/6/2019	7/7/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	6/17/2020
tblConstructionPhase	PhaseEndDate	1/6/2019	2/4/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	6/19/2019
tblConstructionPhase	PhaseEndDate	1/6/2019	10/7/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblConstructionPhase	PhaseStartDate	1/7/2019	6/20/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	2/5/2019
tblConstructionPhase	PhaseStartDate	1/7/2019	6/18/2020
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	0.30
tblGrading	MaterialImported	0.00	943.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29

NCPWF IPS - San Diego County APCD Air District, Winter

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblSolidWaste	SolidWasteGenerationRate	8.31	0.29
tblTripsAndVMT	HaulingTripNumber	118.00	63.00
tblTripsAndVMT	VendorTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	3.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	25.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	18.00

NCPWF IPS - San Diego County APCD Air District, Winter

tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,549,375.00	10,400.00

2.0 Emissions Summary

NCPWF IPS - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1605	1.0000e-005	6.9000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000	0.0000	1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	6/18/2020	7/7/2020	5	14	
2	Building Construction	Building Construction	6/20/2019	6/17/2020	5	260	
3	Demolition	Demolition	1/7/2019	2/4/2019	5	21	
4	Grading	Grading	2/5/2019	6/19/2019	5	97	
5	Paving	Paving	6/18/2020	10/7/2020	5	80	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0.3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,050; Non-Residential Outdoor: 3,350; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF IPS - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Dumpers/Tenders	1	8.00	16	0.38
Demolition	Dumpers/Tenders	2	8.00	16	0.38
Demolition	Excavators	1	8.00	158	0.38
	Air Compressors	1	8.00	78	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Dumpers/Tenders	2	8.00	16	0.38
Building Construction	Forklifts	2	6.00	89	0.20
Grading	Rubber Tired Dozers	1	1.00	247	0.40
	Cranes	2	8.00	231	0.29
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

Trips and VMT

NCPWF IPS - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	100.00	6.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	10	10.00	0.00	63.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	4.6785	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037
Total	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.4364					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928
Total	4.4958	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218		281.9928

NCPWF IPS - San Diego County APCD Air District, Winter

3.2 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037
Total	0.0249	0.0167	0.1604	4.8000e-004	0.0493	3.5000e-004	0.0496	0.0131	3.2000e-004	0.0134		47.4679	47.4679	1.4300e-003		47.5037

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754
Total	1.8877	16.2737	12.2687	0.0210		0.9270	0.9270		0.8810	0.8810		1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0288	0.7445	0.2129	1.6200e-003	0.0406	5.2700e-003	0.0459	0.0117	5.0400e-003	0.0167		173.1002	173.1002	0.0146		173.4648
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4729	1.0523	3.1369	9.8200e-003	0.8621	0.0111	0.8732	0.2296	0.0104	0.2400		990.0139	990.0139	0.0410		991.0376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754
Total	0.8729	12.0953	12.9520	0.0210		0.7440	0.7440		0.7203	0.7203	0.0000	1,983.0193	1,983.0193	0.4303		1,993.7754

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0288	0.7445	0.2129	1.6200e-003	0.0406	5.2700e-003	0.0459	0.0117	5.0400e-003	0.0167		173.1002	173.1002	0.0146		173.4648
Worker	0.4441	0.3078	2.9239	8.2000e-003	0.8215	5.8600e-003	0.8273	0.2179	5.4000e-003	0.2233		816.9138	816.9138	0.0264		817.5727
Total	0.4729	1.0523	3.1369	9.8200e-003	0.8621	0.0111	0.8732	0.2296	0.0104	0.2400		990.0139	990.0139	0.0410		991.0376

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173
Total	1.7000	14.8762	11.9896	0.0210		0.8073	0.8073		0.7674	0.7674		1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.4156	0.2776	2.6725	7.9400e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		791.1320	791.1320	0.0238		791.7274
Total	0.4391	0.9536	2.8638	9.5400e-003	0.8621	9.1300e-003	0.8712	0.2296	8.5400e-003	0.2381		963.0093	963.0093	0.0377		963.9505

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173
Total	0.8294	11.7040	12.9118	0.0210		0.7037	0.7037		0.6832	0.6832	0.0000	1,958.9720	1,958.9720	0.4218		1,969.5173

NCPWF IPS - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0235	0.6760	0.1913	1.6000e-003	0.0406	3.3700e-003	0.0440	0.0117	3.2300e-003	0.0149		171.8773	171.8773	0.0138		172.2231
Worker	0.4156	0.2776	2.6725	7.9400e-003	0.8215	5.7600e-003	0.8272	0.2179	5.3100e-003	0.2232		791.1320	791.1320	0.0238		791.7274
Total	0.4391	0.9536	2.8638	9.5400e-003	0.8621	9.1300e-003	0.8712	0.2296	8.5400e-003	0.2381		963.0093	963.0093	0.0377		963.9505

3.4 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378
Total	2.3550	22.7953	15.2215	0.0261		1.2180	1.2180		1.1418	1.1418		2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378
Total	1.4047	17.1119	15.5888	0.0261		0.9308	0.9308		0.8916	0.8916	0.0000	2,534.9688	2,534.9688	0.6308		2,550.7378

NCPWF IPS - San Diego County APCD Air District, Winter

3.4 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573

3.5 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7574	0.0000	0.7574	0.4143	0.0000	0.4143			0.0000			0.0000
Off-Road	1.7044	15.4281	15.1734	0.0248		0.8524	0.8524		0.8070	0.8070		2,377.8589	2,377.8589	0.5664		2,392.0187
Total	1.7044	15.4281	15.1734	0.0248	0.7574	0.8524	1.6098	0.4143	0.8070	1.2213		2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8000e-003	0.1971	0.0451	5.1000e-004	0.0114	7.5000e-004	0.0121	3.1100e-003	7.2000e-004	3.8300e-003		55.2652	55.2652	5.1500e-003		55.3941
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0502	0.2279	0.3375	1.3300e-003	0.0935	1.3400e-003	0.0948	0.0249	1.2600e-003	0.0262		136.9566	136.9566	7.7900e-003		137.1514

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3408	0.0000	0.3408	0.1865	0.0000	0.1865			0.0000			0.0000
Off-Road	0.9445	12.5296	15.6700	0.0248		0.7254	0.7254		0.7067	0.7067	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187
Total	0.9445	12.5296	15.6700	0.0248	0.3408	0.7254	1.0662	0.1865	0.7067	0.8932	0.0000	2,377.8589	2,377.8589	0.5664		2,392.0187

NCPWF IPS - San Diego County APCD Air District, Winter

3.5 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8000e-003	0.1971	0.0451	5.1000e-004	0.0114	7.5000e-004	0.0121	3.1100e-003	7.2000e-004	3.8300e-003		55.2652	55.2652	5.1500e-003		55.3941
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0308	0.2924	8.2000e-004	0.0822	5.9000e-004	0.0827	0.0218	5.4000e-004	0.0223		81.6914	81.6914	2.6400e-003		81.7573
Total	0.0502	0.2279	0.3375	1.3300e-003	0.0935	1.3400e-003	0.0948	0.0249	1.2600e-003	0.0262		136.9566	136.9566	7.7900e-003		137.1514

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9039	8.3029	7.9626	0.0129		0.4464	0.4464		0.4155	0.4155		1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4855	6.3769	8.2906	0.0129		0.3600	0.3600		0.3522	0.3522	0.0000	1,185.0002	1,185.0002	0.3368		1,193.4204

NCPWF IPS - San Diego County APCD Air District, Winter

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

NCPWF IPS - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF IPS - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCPWF IPS - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Unmitigated	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

NCPWF IPS - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0170					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1434					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003
Total	0.1605	1.0000e-005	6.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.4700e-003	1.4700e-003	0.0000		1.5600e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF IPS - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

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tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0693	0.6169	0.4900	1.0200e-003	0.0302	0.0312	0.0613	6.7200e-003	0.0293	0.0361	0.0000	92.1053	92.1053	0.0206	0.0000	92.6191
2019	0.4878	4.2617	3.5616	7.6300e-003	0.0694	0.2085	0.2779	0.0175	0.1974	0.2149	0.0000	677.6122	677.6122	0.1532	0.0000	681.4413
2020	0.4091	3.7641	3.2287	5.9500e-003	0.0333	0.1956	0.2290	8.8500e-003	0.1838	0.1926	0.0000	517.3154	517.3154	0.1274	0.0000	520.5000
2021	0.2731	2.4184	2.4939	4.6700e-003	0.0273	0.1262	0.1535	7.2400e-003	0.1181	0.1253	0.0000	409.4421	409.4421	0.1068	0.0000	412.1115
Maximum	0.4878	4.2617	3.5616	7.6300e-003	0.0694	0.2085	0.2779	0.0175	0.1974	0.2149	0.0000	677.6122	677.6122	0.1532	0.0000	681.4413

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0250	0.4770	0.5513	1.0200e-003	0.0261	0.0229	0.0490	6.2100e-003	0.0229	0.0291	0.0000	92.1052	92.1052	0.0206	0.0000	92.6190
2019	0.1901	3.5757	4.2110	7.6300e-003	0.0653	0.1780	0.2432	0.0170	0.1779	0.1949	0.0000	677.6115	677.6115	0.1532	0.0000	681.4406
2020	0.1512	2.7734	3.8156	5.9500e-003	0.0333	0.1491	0.1824	8.8500e-003	0.1491	0.1579	0.0000	517.3148	517.3148	0.1274	0.0000	520.4994
2021	0.1151	2.1922	3.0019	4.6700e-003	0.0273	0.1227	0.1500	7.2400e-003	0.1227	0.1300	0.0000	409.4416	409.4416	0.1068	0.0000	412.1110
Maximum	0.1901	3.5757	4.2110	7.6300e-003	0.0653	0.1780	0.2432	0.0170	0.1779	0.1949	0.0000	677.6115	677.6115	0.1532	0.0000	681.4406

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	61.16	18.47	-18.47	0.00	5.12	15.82	13.45	2.51	10.60	10.03	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-14-2018	2-13-2019	1.2602	0.9655
2	2-14-2019	5-13-2019	1.1486	0.9285
3	5-14-2019	8-13-2019	1.1860	0.9585
4	8-14-2019	11-13-2019	0.0902	0.0729
10	2-14-2021	5-13-2021	0.5469	0.4914
11	5-14-2021	8-13-2021	0.6985	0.6276
12	8-14-2021	9-30-2021	0.3644	0.3275
		Highest	1.2602	0.9655

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.8000e-004	3.0000e-005	2.9600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2000e-004	2.0000e-005	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.14	33.33	41.89	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.07	46.07	50.00	0.00	46.81

3.0 Construction Detail

Construction Phase

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4500e-003	0.0000	7.4500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0646	0.5447	0.4546	7.9000e-004		0.0308	0.0308		0.0290	0.0290	0.0000	69.8588	69.8588	0.0189	0.0000	70.3299
Total	0.0646	0.5447	0.4546	7.9000e-004	7.4500e-003	0.0308	0.0383	9.2000e-004	0.0290	0.0300	0.0000	69.8588	69.8588	0.0189	0.0000	70.3299

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-003	0.0700	0.0146	1.7000e-004	0.0172	2.7000e-004	0.0175	4.3400e-003	2.6000e-004	4.6000e-003	0.0000	16.9935	16.9935	1.5300e-003	0.0000	17.0319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	2.2200e-003	0.0208	6.0000e-005	5.5100e-003	4.0000e-005	5.5500e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.2529	5.2529	1.8000e-004	0.0000	5.2573
Total	4.6500e-003	0.0722	0.0354	2.3000e-004	0.0227	3.1000e-004	0.0231	5.8000e-003	3.0000e-004	6.1000e-003	0.0000	22.2465	22.2465	1.7100e-003	0.0000	22.2892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3500e-003	0.0000	3.3500e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.4048	0.5159	7.9000e-004		0.0226	0.0226		0.0226	0.0226	0.0000	69.8587	69.8587	0.0189	0.0000	70.3298
Total	0.0203	0.4048	0.5159	7.9000e-004	3.3500e-003	0.0226	0.0259	4.1000e-004	0.0226	0.0230	0.0000	69.8587	69.8587	0.0189	0.0000	70.3298

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3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-003	0.0700	0.0146	1.7000e-004	0.0172	2.7000e-004	0.0175	4.3400e-003	2.6000e-004	4.6000e-003	0.0000	16.9935	16.9935	1.5300e-003	0.0000	17.0319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	2.2200e-003	0.0208	6.0000e-005	5.5100e-003	4.0000e-005	5.5500e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.2529	5.2529	1.8000e-004	0.0000	5.2573
Total	4.6500e-003	0.0722	0.0354	2.3000e-004	0.0227	3.1000e-004	0.0231	5.8000e-003	3.0000e-004	6.1000e-003	0.0000	22.2465	22.2465	1.7100e-003	0.0000	22.2892

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4500e-003	0.0000	7.4500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2807	2.3694	2.1796	3.8500e-003		0.1291	0.1291		0.1216	0.1216	0.0000	336.7294	336.7294	0.0909	0.0000	339.0018
Total	0.2807	2.3694	2.1796	3.8500e-003	7.4500e-003	0.1291	0.1366	9.2000e-004	0.1216	0.1226	0.0000	336.7294	336.7294	0.0909	0.0000	339.0018

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3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2500e-003	0.3227	0.0704	8.3000e-004	0.0208	1.2100e-003	0.0220	5.6300e-003	1.1500e-003	6.7800e-003	0.0000	82.0800	82.0800	7.4300e-003	0.0000	82.2658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	9.6900e-003	0.0914	2.8000e-004	0.0269	1.9000e-004	0.0271	7.1500e-003	1.7000e-004	7.3200e-003	0.0000	24.8723	24.8723	7.7000e-004	0.0000	24.8917
Total	0.0212	0.3323	0.1618	1.1100e-003	0.0477	1.4000e-003	0.0491	0.0128	1.3200e-003	0.0141	0.0000	106.9523	106.9523	8.2000e-003	0.0000	107.1574

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3500e-003	0.0000	3.3500e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0992	1.9762	2.5186	3.8500e-003		0.1102	0.1102		0.1102	0.1102	0.0000	336.7290	336.7290	0.0909	0.0000	339.0014
Total	0.0992	1.9762	2.5186	3.8500e-003	3.3500e-003	0.1102	0.1136	4.1000e-004	0.1102	0.1106	0.0000	336.7290	336.7290	0.0909	0.0000	339.0014

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3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2500e-003	0.3227	0.0704	8.3000e-004	0.0208	1.2100e-003	0.0220	5.6300e-003	1.1500e-003	6.7800e-003	0.0000	82.0800	82.0800	7.4300e-003	0.0000	82.2658
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	9.6900e-003	0.0914	2.8000e-004	0.0269	1.9000e-004	0.0271	7.1500e-003	1.7000e-004	7.3200e-003	0.0000	24.8723	24.8723	7.7000e-004	0.0000	24.8917
Total	0.0212	0.3323	0.1618	1.1100e-003	0.0477	1.4000e-003	0.0491	0.0128	1.3200e-003	0.0141	0.0000	106.9523	106.9523	8.2000e-003	0.0000	107.1574

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1796	1.5549	1.1719	2.5300e-003		0.0779	0.0779		0.0744	0.0744	0.0000	220.7913	220.7913	0.0537	0.0000	222.1326
Total	0.1796	1.5549	1.1719	2.5300e-003		0.0779	0.0779		0.0744	0.0744	0.0000	220.7913	220.7913	0.0537	0.0000	222.1326

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3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494
Total	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0634	1.2621	1.4822	2.5300e-003		0.0663	0.0663		0.0663	0.0663	0.0000	220.7911	220.7911	0.0537	0.0000	222.1324
Total	0.0634	1.2621	1.4822	2.5300e-003		0.0663	0.0663		0.0663	0.0663	0.0000	220.7911	220.7911	0.0537	0.0000	222.1324

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3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494
Total	6.3100e-003	5.1200e-003	0.0483	1.5000e-004	0.0142	1.0000e-004	0.0143	3.7800e-003	9.0000e-005	3.8700e-003	0.0000	13.1392	13.1392	4.1000e-004	0.0000	13.1494

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1811	1.5680	1.2683	2.8000e-003		0.0751	0.0751		0.0717	0.0717	0.0000	240.5781	240.5781	0.0585	0.0000	242.0410
Total	0.1811	1.5680	1.2683	2.8000e-003		0.0751	0.0751		0.0717	0.0717	0.0000	240.5781	240.5781	0.0585	0.0000	242.0410

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3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738
Total	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0701	1.3950	1.6383	2.8000e-003		0.0732	0.0732		0.0732	0.0732	0.0000	240.5778	240.5778	0.0585	0.0000	242.0407
Total	0.0701	1.3950	1.6383	2.8000e-003		0.0732	0.0732		0.0732	0.0732	0.0000	240.5778	240.5778	0.0585	0.0000	242.0407

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3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738
Total	6.5300e-003	5.1100e-003	0.0489	1.6000e-004	0.0157	1.1000e-004	0.0158	4.1700e-003	1.0000e-004	4.2700e-003	0.0000	14.0635	14.0635	4.1000e-004	0.0000	14.0738

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2142	2.1853	1.8568	2.8200e-003		0.1203	0.1203		0.1119	0.1119	0.0000	246.9025	246.9025	0.0680	0.0000	248.6026
Total	0.2142	2.1853	1.8568	2.8200e-003		0.1203	0.1203		0.1119	0.1119	0.0000	246.9025	246.9025	0.0680	0.0000	248.6026

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3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827
Total	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0673	1.3676	2.0737	2.8200e-003		0.0756	0.0756		0.0756	0.0756	0.0000	246.9022	246.9022	0.0680	0.0000	248.6023
Total	0.0673	1.3676	2.0737	2.8200e-003		0.0756	0.0756		0.0756	0.0756	0.0000	246.9022	246.9022	0.0680	0.0000	248.6023

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3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827
Total	7.3200e-003	5.7300e-003	0.0548	1.7000e-004	0.0176	1.2000e-004	0.0177	4.6800e-003	1.1000e-004	4.7900e-003	0.0000	15.7713	15.7713	4.6000e-004	0.0000	15.7827

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0506	0.5109	0.5017	7.7000e-004		0.0275	0.0275		0.0256	0.0256	0.0000	67.6037	67.6037	0.0186	0.0000	68.0676
Total	0.0506	0.5109	0.5017	7.7000e-004		0.0275	0.0275		0.0256	0.0256	0.0000	67.6037	67.6037	0.0186	0.0000	68.0676

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3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772
Total	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0184	0.3746	0.5680	7.7000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	67.6037	67.6037	0.0186	0.0000	68.0675
Total	0.0184	0.3746	0.5680	7.7000e-004		0.0207	0.0207		0.0207	0.0207	0.0000	67.6037	67.6037	0.0186	0.0000	68.0675

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3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772
Total	1.8900e-003	1.4300e-003	0.0140	5.0000e-005	4.8300e-003	3.0000e-005	4.8600e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	4.1743	4.1743	1.2000e-004	0.0000	4.1772

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2118	1.8994	1.9130	3.6400e-003		0.0985	0.0985		0.0923	0.0923	0.0000	318.2487	318.2487	0.0876	0.0000	320.4379
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.2118	1.8994	1.9130	3.6400e-003		0.0985	0.0985		0.0923	0.0923	0.0000	318.2487	318.2487	0.0876	0.0000	320.4379

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3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288
Total	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0860	1.8096	2.3546	3.6400e-003		0.1018	0.1018		0.1018	0.1018	0.0000	318.2484	318.2484	0.0876	0.0000	320.4376
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0860	1.8096	2.3546	3.6400e-003		0.1018	0.1018		0.1018	0.1018	0.0000	318.2484	318.2484	0.0876	0.0000	320.4376

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3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288
Total	8.8100e-003	6.6400e-003	0.0653	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9600e-003	1.4000e-004	6.1000e-003	0.0000	19.4153	19.4153	5.4000e-004	0.0000	19.4288

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Unmitigated	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003
Total	2.8000e-004	3.0000e-005	2.9600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7300e-003	5.7300e-003	2.0000e-005	0.0000	6.1100e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003
Total	1.2000e-004	2.0000e-005	1.7200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0900e-003	3.0900e-003	1.0000e-005	0.0000	3.2500e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Annual

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.0717	36.1949	28.8800	0.0602	1.4470	1.8322	3.2792	0.3590	1.7257	2.0847	0.0000	5,998.7476	5,998.7476	1.3317	0.0000	6,032.0413
2019	3.9106	32.8313	28.2650	0.0599	0.6626	1.6420	2.2348	0.1665	1.5672	1.6485	0.0000	5,918.4229	5,918.4229	1.3152	0.0000	5,951.3025
2020	3.5714	29.9554	25.1583	0.0564	0.3066	1.5333	1.7633	0.0813	1.4264	1.4874	0.0000	5,362.8238	5,362.8238	1.2376	0.0000	5,393.7649
2021	2.4399	23.8250	24.0367	0.0387	0.2299	1.2811	1.5110	0.0610	1.1921	1.2530	0.0000	3,733.8994	3,733.8994	0.9716	0.0000	3,758.1882
Maximum	4.0717	36.1949	28.8800	0.0602	1.4470	1.8322	3.2792	0.3590	1.7257	2.0847	0.0000	5,998.7476	5,998.7476	1.3317	0.0000	6,032.0413

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1000e-003	3.0000e-004	0.0329	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004	0.0000	0.0749

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.3100e-003	1.7000e-004	0.0191	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005	0.0000	0.0398

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.74	43.33	42.08	0.00	0.00	58.33	58.33	0.00	58.33	58.33	0.00	46.10	46.10	57.89	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.8025	32.0419	26.7394	0.0464		1.8140	1.8140		1.7084	1.7084		4,529.7709	4,529.7709	1.2220		4,560.3202
Total	3.8025	32.0419	26.7394	0.0464	0.0745	1.8140	1.8885	9.2000e-003	1.7084	1.7176		4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1161	4.0348	0.8321	0.0102	1.0405	0.0159	1.0564	0.2617	0.0152	0.2769		1,109.626 1	1,109.626 1	0.0978		1,112.0715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.2692	4.1530	2.1406	0.0138	1.3726	0.0182	1.3908	0.3498	0.0173	0.3671		1,468.976 7	1,468.976 7	0.1098		1,471.721 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,529.770 9	4,529.770 9	1.2220		4,560.320 2
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,529.770 9	4,529.770 9	1.2220		4,560.320 2

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1161	4.0348	0.8321	0.0102	1.0405	0.0159	1.0564	0.2617	0.0152	0.2769		1,109.626 1	1,109.626 1	0.0978		1,112.0715
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.2692	4.1530	2.1406	0.0138	1.3726	0.0182	1.3908	0.3498	0.0173	0.3671		1,468.976 7	1,468.976 7	0.1098		1,471.721 1

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.055 1	4,472.055 1	1.2072		4,502.234 8
Total	3.3824	28.5469	26.2597	0.0464	0.0745	1.5556	1.6301	9.2000e-003	1.4655	1.4747		4,472.055 1	4,472.055 1	1.2072		4,502.234 8

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1101	3.8102	0.8225	0.0101	0.2560	0.0144	0.2704	0.0692	0.0138	0.0829		1,097.8521	1,097.8521	0.0972		1,100.2810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.2514	3.9160	2.0053	0.0136	0.5881	0.0167	0.6048	0.1573	0.0159	0.1731		1,446.3679	1,446.3679	0.1080		1,449.0677

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1101	3.8102	0.8225	0.0101	0.2560	0.0144	0.2704	0.0692	0.0138	0.0829		1,097.8521	1,097.8521	0.0972		1,100.2810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.2514	3.9160	2.0053	0.0136	0.5881	0.0167	0.6048	0.1573	0.0159	0.1731		1,446.3679	1,446.3679	0.1080		1,449.0677

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329
Total	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569
Total	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569
Total	0.1305	0.0976	1.0918	3.2300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		321.7068	321.7068	0.0100		321.9569

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903
Total	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747
Total	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747
Total	0.1221	0.0882	1.0009	3.1300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		311.5481	311.5481	9.0600e-003		311.7747

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226
Total	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310
Total	0.0916	0.0661	0.7507	2.3400e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		233.6611	233.6611	6.8000e-003		233.8310

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454
Total	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646
Total	0.0864	0.0602	0.7034	2.2700e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		225.8075	225.8075	6.2800e-003		225.9646

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Unmitigated	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Total	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Total	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

NCPWF Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	320.54	1000sqft	7.36	320,535.24	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Tunneling
tblOffRoadEquipment	PhaseName		Subaqueous Pipeline
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Trenching

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblOffRoadEquipment	PhaseName		Tunneling
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	397.47	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	2,537.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	74,124,875.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	4.0988	36.2526	28.8501	0.0598	1.4470	1.8325	3.2796	0.3590	1.7261	2.0851	0.0000	5,958.204 2	5,958.204 2	1.3347	0.0000	5,991.572 0
2019	3.9312	32.8432	28.2358	0.0595	0.6626	1.6420	2.2352	0.1665	1.5672	1.6485	0.0000	5,878.468 1	5,878.468 1	1.3180	0.0000	5,911.4192
2020	3.5909	29.9662	25.0817	0.0562	0.3066	1.5333	1.7633	0.0813	1.4264	1.4874	0.0000	5,343.617 3	5,343.617 3	1.2371	0.0000	5,374.544 3
2021	2.4539	23.8323	23.9812	0.0385	0.2299	1.2811	1.5110	0.0610	1.1921	1.2530	0.0000	3,719.975 1	3,719.975 1	0.9712	0.0000	3,744.253 9
Maximum	4.0988	36.2526	28.8501	0.0598	1.4470	1.8325	3.2796	0.3590	1.7261	2.0851	0.0000	5,958.204 2	5,958.204 2	1.3347	0.0000	5,991.572 0

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.1000e-003	3.0000e-004	0.0329	0.0000	0.0000	1.2000e-004	1.2000e-004	0.0000	1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004	0.0000	0.0749

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.3100e-003	1.7000e-004	0.0191	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005	0.0000	0.0398

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.74	43.33	42.08	0.00	0.00	58.33	58.33	0.00	58.33	58.33	0.00	46.10	46.10	57.89	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	11/14/2018	8/20/2019	5	200	
2	Tunneling	Trenching	8/21/2019	5/26/2020	5	200	
3	Subaqueous Pipeline	Trenching	5/27/2020	3/2/2021	5	200	
4	Paving	Paving	3/3/2021	12/7/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Tunneling	Bore/Drill Rigs	1	8.00	221	0.50
Tunneling	Cranes	1	8.00	231	0.29
Tunneling	Crushing/Proc. Equipment	1	8.00	85	0.78
Tunneling	Generator Sets	1	8.00	84	0.74
Tunneling	Off-Highway Trucks	1	8.00	402	0.38
Tunneling	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Tunneling	Welders	2	8.00	46	0.45
Subaqueous Pipeline	Forklifts	1	8.00	89	0.20
Subaqueous Pipeline	Generator Sets	1	8.00	84	0.74
Subaqueous Pipeline	Other Construction Equipment	4	8.00	172	0.42
Subaqueous Pipeline	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	2,537.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Tunneling	9	24.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Subaqueous Pipeline	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.8025	32.0419	26.7394	0.0464		1.8140	1.8140		1.7084	1.7084		4,529.7709	4,529.7709	1.2220		4,560.3202
Total	3.8025	32.0419	26.7394	0.0464	0.0745	1.8140	1.8885	9.2000e-003	1.7084	1.7176		4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1194	4.0779	0.8947	0.0100	1.0405	0.0163	1.0567	0.2617	0.0155	0.2773		1,091.2129	1,091.2129	0.1015		1,093.7498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.2963	4.2106	2.1107	0.0134	1.3726	0.0186	1.3911	0.3498	0.0177	0.3675		1,428.4332	1,428.4332	0.1128		1,431.2519

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,529.7709	4,529.7709	1.2220		4,560.3202
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,529.7709	4,529.7709	1.2220		4,560.3202

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1194	4.0779	0.8947	0.0100	1.0405	0.0163	1.0567	0.2617	0.0155	0.2773		1,091.2129	1,091.2129	0.1015		1,093.7498
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.2963	4.2106	2.1107	0.0134	1.3726	0.0186	1.3911	0.3498	0.0177	0.3675		1,428.4332	1,428.4332	0.1128		1,431.2519

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0745	0.0000	0.0745	9.2000e-003	0.0000	9.2000e-003			0.0000			0.0000
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464	0.0745	1.5556	1.6301	9.2000e-003	1.4655	1.4747		4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1132	3.8493	0.8814	9.9000e-003	0.2560	0.0147	0.2707	0.0692	0.0141	0.0833		1,079.3779	1,079.3779	0.1007		1,081.8947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.2768	3.9680	1.9762	0.0132	0.5881	0.0170	0.6051	0.1573	0.0162	0.1734		1,406.4130	1,406.4130	0.1109		1,409.1844

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0335	0.0000	0.0335	4.1400e-003	0.0000	4.1400e-003			0.0000			0.0000
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464	0.0335	1.3279	1.3614	4.1400e-003	1.3279	1.3321	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1132	3.8493	0.8814	9.9000e-003	0.2560	0.0147	0.2707	0.0692	0.0141	0.0833		1,079.3779	1,079.3779	0.1007		1,081.8947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.2768	3.9680	1.9762	0.0132	0.5881	0.0170	0.6051	0.1573	0.0162	0.1734		1,406.4130	1,406.4130	0.1109		1,409.1844

3.3 Tunneling - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329
Total	3.7802	32.7336	24.6717	0.0533		1.6399	1.6399		1.5652	1.5652		5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136
Total	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,123.8059	5,123.8059	1.2451		5,154.9329

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136
Total	0.1510	0.1096	1.0105	3.0300e-003	0.3066	2.1000e-003	0.3087	0.0813	1.9400e-003	0.0832		301.8786	301.8786	9.4000e-003		302.1136

3.3 Tunneling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903
Total	3.4493	29.8672	24.1574	0.0533		1.4313	1.4313		1.3656	1.3656		5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540
Total	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903
Total	1.3345	26.5705	31.2047	0.0533		1.3951	1.3951		1.3951	1.3951	0.0000	5,051.2757	5,051.2757	1.2286		5,081.9903

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Tunneling - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540
Total	0.1416	0.0990	0.9243	2.9300e-003	0.3066	2.0700e-003	0.3086	0.0813	1.9100e-003	0.0832		292.3416	292.3416	8.5000e-003		292.5540

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226
Total	2.7286	27.8377	23.6538	0.0359		1.5318	1.5318		1.4250	1.4250		3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,467.0503	3,467.0503	0.9549		3,490.9226

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155
Total	0.1062	0.0742	0.6932	2.2000e-003	0.2299	1.5500e-003	0.2315	0.0610	1.4300e-003	0.0624		219.2562	219.2562	6.3700e-003		219.4155

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454
Total	2.3535	23.7648	23.3333	0.0359		1.2796	1.2796		1.1906	1.1906		3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454
Total	0.8568	17.4221	26.4166	0.0359		0.9631	0.9631		0.9631	0.9631	0.0000	3,466.0633	3,466.0633	0.9513		3,489.8454

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Subaqueous Pipeline - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.1179	18.9936	19.1299	0.0364		0.9854	0.9854		0.9233	0.9233		3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0919	3,508.0919	0.9653		3,532.2236

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303
Total	0.1004	0.0675	0.6479	2.1300e-003	0.2299	1.5300e-003	0.2314	0.0610	1.4100e-003	0.0624		211.8832	211.8832	5.8800e-003		212.0303

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Unmitigated	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749
Total	3.1000e-003	3.0000e-004	0.0329	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0702	0.0702	1.9000e-004		0.0749

NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398
Total	1.3100e-003	1.7000e-004	0.0191	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0378	0.0378	8.0000e-005		0.0398

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF Pipeline-Open Trench - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

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tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0337	0.4078	0.2280	4.4000e-004	1.7000e-003	0.0166	0.0183	4.5000e-004	0.0153	0.0158	0.0000	40.2875	40.2875	0.0121	0.0000	40.5898
2019	0.2098	2.0944	1.4040	2.4800e-003	0.0144	0.1089	0.1233	3.8200e-003	0.1014	0.1052	0.0000	221.1154	221.1154	0.0591	0.0000	222.5921
2020	0.0811	0.6561	0.5127	8.9000e-004	3.2200e-003	0.0347	0.0379	8.7000e-004	0.0326	0.0335	0.0000	74.5230	74.5230	0.0195	0.0000	75.0108
Maximum	0.2098	2.0944	1.4040	2.4800e-003	0.0144	0.1089	0.1233	3.8200e-003	0.1014	0.1052	0.0000	221.1154	221.1154	0.0591	0.0000	222.5921

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0112	0.2060	0.2433	4.4000e-004	1.7000e-003	8.7500e-003	0.0104	4.5000e-004	8.7500e-003	9.2000e-003	0.0000	40.2874	40.2874	0.0121	0.0000	40.5897
2019	0.0619	1.1523	1.5031	2.4800e-003	0.0144	0.0603	0.0747	3.8200e-003	0.0603	0.0642	0.0000	221.1152	221.1152	0.0591	0.0000	222.5919
2020	0.0263	0.4812	0.5349	8.9000e-004	3.2200e-003	0.0269	0.0302	8.7000e-004	0.0269	0.0278	0.0000	74.5230	74.5230	0.0195	0.0000	75.0108
Maximum	0.0619	1.1523	1.5031	2.4800e-003	0.0144	0.0603	0.0747	3.8200e-003	0.0603	0.0642	0.0000	221.1152	221.1152	0.0591	0.0000	222.5919

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	69.38	41.76	-6.37	0.00	0.00	40.07	35.77	0.00	35.67	34.48	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-14-2018	2-13-2019	0.8178	0.4200
2	2-14-2019	5-13-2019	0.4063	0.2190
		Highest	0.8178	0.4200

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	50.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0329	0.4071	0.2217	4.2000e-004		0.0166	0.0166		0.0153	0.0153	0.0000	38.6712	38.6712	0.0120	0.0000	38.9722
Total	0.0329	0.4071	0.2217	4.2000e-004	0.0000	0.0166	0.0166	0.0000	0.0153	0.0153	0.0000	38.6712	38.6712	0.0120	0.0000	38.9722

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3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176
Total	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.2054	0.2369	4.2000e-004		8.7400e-003	8.7400e-003		8.7400e-003	8.7400e-003	0.0000	38.6711	38.6711	0.0120	0.0000	38.9721
Total	0.0104	0.2054	0.2369	4.2000e-004	0.0000	8.7400e-003	8.7400e-003	0.0000	8.7400e-003	8.7400e-003	0.0000	38.6711	38.6711	0.0120	0.0000	38.9721

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3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176
Total	8.2000e-004	6.8000e-004	6.3900e-003	2.0000e-005	1.7000e-003	1.0000e-005	1.7100e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.6163	1.6163	5.0000e-005	0.0000	1.6176

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0589	0.7204	0.4027	8.2000e-004		0.0288	0.0288		0.0265	0.0265	0.0000	73.7945	73.7945	0.0234	0.0000	74.3781
Total	0.0589	0.7204	0.4027	8.2000e-004	0.0000	0.0288	0.0288	0.0000	0.0265	0.0265	0.0000	73.7945	73.7945	0.0234	0.0000	74.3781

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3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451
Total	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0202	0.3986	0.4599	8.2000e-004		0.0170	0.0170		0.0170	0.0170	0.0000	73.7944	73.7944	0.0234	0.0000	74.3781
Total	0.0202	0.3986	0.4599	8.2000e-004	0.0000	0.0170	0.0170	0.0000	0.0170	0.0170	0.0000	73.7944	73.7944	0.0234	0.0000	74.3781

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3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451
Total	1.4600e-003	1.1900e-003	0.0112	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.0428	3.0428	9.0000e-005	0.0000	3.0451

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1335	1.2578	0.8431	1.3600e-003		0.0726	0.0726		0.0679	0.0679	0.0000	120.7680	120.7680	0.0311	0.0000	121.5459
Total	0.1335	1.2578	0.8431	1.3600e-003	0.0000	0.0726	0.0726	0.0000	0.0679	0.0679	0.0000	120.7680	120.7680	0.0311	0.0000	121.5459

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3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742
Total	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0318	0.6661	0.8831	1.3600e-003		0.0375	0.0375		0.0375	0.0375	0.0000	120.7679	120.7679	0.0311	0.0000	121.5457
Total	0.0318	0.6661	0.8831	1.3600e-003	0.0000	0.0375	0.0375	0.0000	0.0375	0.0375	0.0000	120.7679	120.7679	0.0311	0.0000	121.5457

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3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742
Total	3.8700e-003	3.1400e-003	0.0297	9.0000e-005	8.7300e-003	6.0000e-005	8.7900e-003	2.3200e-003	6.0000e-005	2.3800e-003	0.0000	8.0679	8.0679	2.5000e-004	0.0000	8.0742

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1110	0.1094	1.5000e-004		7.4100e-003	7.4100e-003		6.8200e-003	6.8200e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572
Total	0.0111	0.1110	0.1094	1.5000e-004	0.0000	7.4100e-003	7.4100e-003	0.0000	6.8200e-003	6.8200e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572

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3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916
Total	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6100e-003	0.0824	0.1113	1.5000e-004		5.7700e-003	5.7700e-003		5.7700e-003	5.7700e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572
Total	3.6100e-003	0.0824	0.1113	1.5000e-004	0.0000	5.7700e-003	5.7700e-003	0.0000	5.7700e-003	5.7700e-003	0.0000	13.2524	13.2524	4.1900e-003	0.0000	13.3572

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3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916
Total	1.0500e-003	8.5000e-004	8.0500e-003	2.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.3000e-004	2.0000e-005	6.4000e-004	0.0000	2.1899	2.1899	7.0000e-005	0.0000	2.1916

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	5.2600e-003	5.7000e-003	1.0000e-005		3.3000e-004	3.3000e-004		3.1000e-004	3.1000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877
Total	5.2000e-004	5.2600e-003	5.7000e-003	1.0000e-005	0.0000	3.3000e-004	3.3000e-004	0.0000	3.1000e-004	3.1000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877

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3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117
Total	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9000e-004	4.3400e-003	5.8600e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877
Total	1.9000e-004	4.3400e-003	5.8600e-003	1.0000e-005	0.0000	3.0000e-004	3.0000e-004	0.0000	3.0000e-004	3.0000e-004	0.0000	0.6821	0.6821	2.2000e-004	0.0000	0.6877

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3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117
Total	5.0000e-005	4.0000e-005	3.9000e-004	0.0000	1.2000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1116	0.1116	0.0000	0.0000	0.1117

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0674	0.5320	0.3965	7.0000e-004		0.0265	0.0265		0.0250	0.0250	0.0000	57.8110	57.8110	0.0154	0.0000	58.1958
Total	0.0674	0.5320	0.3965	7.0000e-004		0.0265	0.0265		0.0250	0.0250	0.0000	57.8110	57.8110	0.0154	0.0000	58.1958

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3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0109	2.8900e-003	3.0000e-005	6.0000e-004	5.0000e-005	6.5000e-004	1.7000e-004	5.0000e-005	2.2000e-004	0.0000	2.4361	2.4361	1.9000e-004	0.0000	2.4409
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	8.8000e-004	0.0113	6.7700e-003	4.0000e-005	1.8500e-003	6.0000e-005	1.9100e-003	5.0000e-004	6.0000e-005	5.6000e-004	0.0000	3.5523	3.5523	2.2000e-004	0.0000	3.5579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0215	0.3928	0.4204	7.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	57.8109	57.8109	0.0154	0.0000	58.1957
Total	0.0215	0.3928	0.4204	7.0000e-004		0.0215	0.0215		0.0215	0.0215	0.0000	57.8109	57.8109	0.0154	0.0000	58.1957

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3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6000e-004	0.0109	2.8900e-003	3.0000e-005	6.0000e-004	5.0000e-005	6.5000e-004	1.7000e-004	5.0000e-005	2.2000e-004	0.0000	2.4361	2.4361	1.9000e-004	0.0000	2.4409
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	8.8000e-004	0.0113	6.7700e-003	4.0000e-005	1.8500e-003	6.0000e-005	1.9100e-003	5.0000e-004	6.0000e-005	5.6000e-004	0.0000	3.5523	3.5523	2.2000e-004	0.0000	3.5579

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0118	0.1071	0.0995	1.3000e-004		7.8100e-003	7.8100e-003		7.1800e-003	7.1800e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409
Total	0.0118	0.1071	0.0995	1.3000e-004		7.8100e-003	7.8100e-003		7.1800e-003	7.1800e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409

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3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1700e-003	0.0723	0.0976	1.3000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409
Total	3.1700e-003	0.0723	0.0976	1.3000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003	0.0000	11.2499	11.2499	3.6400e-003	0.0000	11.3409

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3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170
Total	5.2000e-004	4.1000e-004	3.8800e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1162	1.1162	3.0000e-005	0.0000	1.1170

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005
Total	0.0000	0.0000	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e-005	4.0000e-005	0.0000	0.0000	4.0000e-005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.9798	23.9852	13.4407	0.0260	0.1022	0.9780	1.0802	0.0271	0.8998	0.9269	0.0000	2,618.0795	2,618.0795	0.7843	0.0000	2,637.6871
2019	2.7454	25.2121	17.4981	0.0291	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,850.1419	2,850.1419	0.7832	0.0000	2,867.4358
2020	1.3643	10.8625	8.0672	0.0148	0.0511	0.5304	0.5681	0.0136	0.5019	0.5122	0.0000	1,354.8194	1,354.8194	0.3442	0.0000	1,363.4248
Maximum	2.7454	25.2121	17.4981	0.0291	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,850.1419	2,850.1419	0.7843	0.0000	2,867.4358

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.6582	12.1160	14.3385	0.0260	0.1022	0.5147	0.6168	0.0271	0.5146	0.5417	0.0000	2,618.0795	2,618.0795	0.7843	0.0000	2,637.6871
2019	0.7111	13.3794	18.2991	0.0291	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,850.1419	2,850.1419	0.7832	0.0000	2,867.4358
2020	0.4467	8.0793	8.5457	0.0148	0.0511	0.4311	0.4689	0.0136	0.4311	0.4414	0.0000	1,354.8194	1,354.8194	0.3442	0.0000	1,363.4248
Maximum	0.7111	13.3794	18.2991	0.0291	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,850.1419	2,850.1419	0.7843	0.0000	2,867.4358

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	70.18	44.10	-5.58	0.00	0.00	42.70	38.55	0.00	38.55	37.40	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.0000e-005	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	50.00	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.67	46.67	0.00	0.00	45.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9327	23.9488	13.0381	0.0249		0.9773	0.9773		0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7
Total	1.9327	23.9488	13.0381	0.0249	0.0000	0.9773	0.9773	0.0000	0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614
Total	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614
Total	0.0471	0.0364	0.4026	1.1100e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		110.5694	110.5694	3.6800e-003		110.6614

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190
Total	0.0435	0.0326	0.3640	1.0800e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		107.2356	107.2356	3.3300e-003		107.3190

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

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3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

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3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

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3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595
Total	0.0217	0.0163	0.1820	5.4000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		53.6178	53.6178	1.6700e-003		53.6595

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

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3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624
Total	0.0203	0.0147	0.1668	5.2000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		51.9247	51.9247	1.5100e-003		51.9624

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969
Total	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969

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3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0172	0.2231	0.1381	7.7000e-004	0.0378	1.1700e-003	0.0390	0.0103	1.1200e-003	0.0114		80.3058	80.3058	4.8900e-003		80.4278

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969
Total	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969

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3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.0300e-003	0.2158	0.0547	5.1000e-004	0.0123	1.0000e-003	0.0133	3.5300e-003	9.6000e-004	4.4900e-003		54.3434	54.3434	4.1300e-003		54.4466
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0172	0.2231	0.1381	7.7000e-004	0.0378	1.1700e-003	0.0390	0.0103	1.1200e-003	0.0114		80.3058	80.3058	4.8900e-003		80.4278

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235
Total	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235

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3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235
Total	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235

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3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812
Total	0.0102	7.3500e-003	0.0834	2.6000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		25.9623	25.9623	7.6000e-004		25.9812

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Unmitigated	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Total	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Total	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

NCPWF Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	2.06	1000sqft	0.05	2,057.63	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblConstructionPhase	NumDays	1.00	100.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	BuildingSpaceSquareFeet	2,060.00	2,057.63
tblLandUse	LandUseSquareFeet	2,060.00	2,057.63
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Connections
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Site Preparation at Portal Sites
tblOffRoadEquipment	PhaseName		Portal Excavation
tblOffRoadEquipment	PhaseName		Pipe Installation
tblOffRoadEquipment	UsageHours	4.00	8.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	2.55	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	2.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	476,375.00	0.00

2.0 Emissions Summary

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.9871	23.9896	13.4123	0.0260	0.1022	0.9780	1.0802	0.0271	0.8998	0.9269	0.0000	2,611.2703	2,611.2703	0.7841	0.0000	2,630.8725
2019	2.7574	25.2190	17.4507	0.0290	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,838.5754	2,838.5754	0.7830	0.0000	2,855.8605
2020	1.3663	10.8628	8.0671	0.0147	0.0511	0.5304	0.5682	0.0136	0.5019	0.5122	0.0000	1,351.7033	1,351.7033	0.3444	0.0000	1,360.3143
Maximum	2.7574	25.2190	17.4507	0.0290	0.1788	1.4533	1.6321	0.0474	1.3596	1.4070	0.0000	2,838.5754	2,838.5754	0.7841	0.0000	2,855.8605

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	0.6655	12.1205	14.3100	0.0260	0.1022	0.5147	0.6168	0.0271	0.5146	0.5417	0.0000	2,611.2703	2,611.2703	0.7841	0.0000	2,630.8725
2019	0.7231	13.3864	18.2517	0.0290	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,838.5754	2,838.5754	0.7830	0.0000	2,855.8605
2020	0.4487	8.0797	8.5457	0.0147	0.0511	0.4312	0.4689	0.0136	0.4311	0.4414	0.0000	1,351.7033	1,351.7033	0.3444	0.0000	1,360.3143
Maximum	0.7231	13.3864	18.2517	0.0290	0.1788	0.7513	0.9301	0.0474	0.7512	0.7986	0.0000	2,838.5754	2,838.5754	0.7841	0.0000	2,855.8605

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	69.93	44.09	-5.59	0.00	0.00	42.70	38.55	0.00	38.55	37.40	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	2.0000e-005	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.0000e-005	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000	0.0000	2.6000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	50.00	0.00	42.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.67	46.67	0.00	0.00	45.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation at Portal Sites	Site Preparation	11/14/2018	4/2/2019	5	100	
2	Portal Excavation	Site Preparation	4/3/2019	8/20/2019	5	100	
3	Site Restoration	Site Preparation	8/21/2019	1/7/2020	5	100	
4	Pipe Installation	Building Construction	1/8/2020	5/26/2020	5	100	
5	Pipe Connections	Building Construction	5/27/2020	10/13/2020	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation at Portal Sites	Graders	1	8.00	187	0.41
Site Preparation at Portal Sites	Scrapers	1	8.00	367	0.48
Site Preparation at Portal Sites	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Crushing/Proc. Equipment	1	8.00	85	0.78
Portal Excavation	Excavators	1	8.00	158	0.38
Portal Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Portal Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Portal Excavation	Trenchers	1	8.00	78	0.50
Site Restoration	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Cranes	1	8.00	231	0.29
Pipe Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipe Installation	Welders	2	8.00	46	0.45
Pipe Connections	Other General Industrial Equipment	1	8.00	88	0.34

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation at Portal Sites	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Portal Excavation	5	14.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Restoration	1	4.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Installation	4	2.00	2.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Connections	1	2.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.9327	23.9488	13.0381	0.0249		0.9773	0.9773		0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7
Total	1.9327	23.9488	13.0381	0.0249	0.0000	0.9773	0.9773	0.0000	0.8991	0.8991		2,507.510 1	2,507.510 1	0.7806		2,527.025 7

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468
Total	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,507.5101	2,507.5101	0.7806		2,527.0257

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468
Total	0.0544	0.0408	0.3742	1.0400e-003	0.1022	7.1000e-004	0.1029	0.0271	6.5000e-004	0.0278		103.7601	103.7601	3.4700e-003		103.8468

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7848	21.8308	12.2022	0.0249		0.8732	0.8732		0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809
Total	1.7848	21.8308	12.2022	0.0249	0.0000	0.8732	0.8732	0.0000	0.8034	0.8034		2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6111	12.0796	13.9359	0.0249		0.5139	0.5139		0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809
Total	0.6111	12.0796	13.9359	0.0249	0.0000	0.5139	0.5139	0.0000	0.5139	0.5139	0.0000	2,464.9835	2,464.9835	0.7799		2,484.4809

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Site Preparation at Portal Sites - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045
Total	0.0503	0.0365	0.3369	1.0100e-003	0.1022	7.0000e-004	0.1029	0.0271	6.5000e-004	0.0277		100.6262	100.6262	3.1300e-003		100.7045

3.3 Portal Excavation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	2.6693	25.1551	16.8612	0.0272		1.4521	1.4521		1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276
Total	2.6693	25.1551	16.8612	0.0272	0.0000	1.4521	1.4521	0.0000	1.3585	1.3585		2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6350	13.3224	17.6622	0.0272		0.7501	0.7501		0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276
Total	0.6350	13.3224	17.6622	0.0272	0.0000	0.7501	0.7501	0.0000	0.7501	0.7501	0.0000	2,662.4796	2,662.4796	0.6859		2,679.6276

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Portal Excavation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329

3.4 Site Restoration - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003	0.0000	0.1560	0.1560	0.0000	0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523
Total	0.0252	0.0183	0.1684	5.0000e-004	0.0511	3.5000e-004	0.0514	0.0136	3.2000e-004	0.0139		50.3131	50.3131	1.5700e-003		50.3523

3.4 Site Restoration - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003	0.0000	0.1331	0.1331	0.0000	0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003	0.0000	0.1215	0.1215	0.0000	0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.4 Site Restoration - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590
Total	0.0236	0.0165	0.1541	4.9000e-004	0.0511	3.4000e-004	0.0514	0.0136	3.2000e-004	0.0139		48.7236	48.7236	1.4200e-003		48.7590

3.5 Pipe Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969
Total	1.3471	10.6393	7.9291	0.0140		0.5292	0.5292		0.5007	0.5007		1,274.5136	1,274.5136	0.3393		1,282.9969

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Pipe Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0192	0.2235	0.1380	7.3000e-004	0.0378	1.2000e-003	0.0390	0.0103	1.1400e-003	0.0114		77.1897	77.1897	5.1100e-003		77.3174

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969
Total	0.4295	7.8562	8.4077	0.0140		0.4300	0.4300		0.4300	0.4300	0.0000	1,274.5136	1,274.5136	0.3393		1,282.9969

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.5 Pipe Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.3800e-003	0.2153	0.0610	4.9000e-004	0.0123	1.0300e-003	0.0133	3.5300e-003	9.8000e-004	4.5100e-003		52.8279	52.8279	4.4000e-003		52.9379
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0192	0.2235	0.1380	7.3000e-004	0.0378	1.2000e-003	0.0390	0.0103	1.1400e-003	0.0114		77.1897	77.1897	5.1100e-003		77.3174

3.6 Pipe Connections - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235
Total	0.2353	2.1429	1.9898	2.5600e-003		0.1561	0.1561		0.1436	0.1436		248.0182	248.0182	0.0802		250.0235

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.6 Pipe Connections - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235
Total	0.0633	1.4459	1.9525	2.5600e-003		0.1013	0.1013		0.1013	0.1013	0.0000	248.0182	248.0182	0.0802		250.0235

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.6 Pipe Connections - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795
Total	0.0118	8.2500e-003	0.0770	2.4000e-004	0.0256	1.7000e-004	0.0257	6.7700e-003	1.6000e-004	6.9300e-003		24.3618	24.3618	7.1000e-004		24.3795

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Unmitigated	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004
Total	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.5000e-004	4.5000e-004	0.0000		4.8000e-004

NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004
Total	1.0000e-005	0.0000	1.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.4000e-004	2.4000e-004	0.0000		2.6000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF Pipeline-Trenchless - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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NCPWF SVR
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	210.00	8.50
tblGrading	AcresOfGrading	150.00	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00

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tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3832	4.4674	2.5185	6.1500e-003	0.3095	0.1736	0.4831	0.1528	0.1600	0.3128	0.0000	559.5196	559.5196	0.1463	0.0000	563.1759
2020	0.4586	4.2846	3.3974	7.8700e-003	0.1898	0.1847	0.3745	0.0515	0.1719	0.2234	0.0000	703.6384	703.6384	0.1350	0.0000	707.0124
2021	1.6985	1.8893	1.6704	3.9000e-003	0.0981	0.0769	0.1750	0.0266	0.0716	0.0981	0.0000	348.4621	348.4621	0.0671	0.0000	350.1403
Maximum	1.6985	4.4674	3.3974	7.8700e-003	0.3095	0.1847	0.4831	0.1528	0.1719	0.3128	0.0000	703.6384	703.6384	0.1463	0.0000	707.0124

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1429	2.7634	2.9024	6.1500e-003	0.1647	0.1031	0.2678	0.0756	0.1030	0.1787	0.0000	559.5191	559.5191	0.1463	0.0000	563.1754
2020	0.2150	3.3279	3.6596	7.8700e-003	0.1898	0.1509	0.3407	0.0515	0.1507	0.2022	0.0000	703.6379	703.6379	0.1350	0.0000	707.0119
2021	1.5993	1.6023	1.8451	3.9000e-003	0.0981	0.0751	0.1732	0.0266	0.0750	0.1016	0.0000	348.4619	348.4619	0.0671	0.0000	350.1401
Maximum	1.5993	3.3279	3.6596	7.8700e-003	0.1898	0.1509	0.3407	0.0756	0.1507	0.2022	0.0000	703.6379	703.6379	0.1463	0.0000	707.0119

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	22.96	27.70	-10.82	0.00	24.23	24.37	24.29	33.41	18.52	23.94	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-21-2019	8-20-2019	2.9825	1.6817
2	8-21-2019	11-20-2019	1.2582	0.8116
3	11-21-2019	2-20-2020	1.2342	0.8843
4	2-21-2020	5-20-2020	1.1620	0.8675
5	5-21-2020	8-20-2020	1.1861	0.8851
6	8-21-2020	11-20-2020	1.1882	0.8871
7	11-21-2020	2-20-2021	1.1307	0.8759
8	2-21-2021	5-20-2021	1.0462	0.8357
9	5-21-2021	8-20-2021	1.0151	0.9494
10	8-21-2021	9-30-2021	0.4494	0.4545
		Highest	2.9825	1.6817

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2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4816	160.4816	7.9400e-003	0.0000	160.6802
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	4.3542	0.0000	4.3542	0.2573	0.0000	10.7872
Water						0.0000	0.0000		0.0000	0.0000	0.2442	3.2749	3.5191	0.0252	6.2000e-004	4.3339
Total	1.4840	0.3442	0.5732	1.9400e-003	0.1571	7.4800e-003	0.1646	0.0421	7.3900e-003	0.0495	4.5983	182.8021	187.4005	0.2932	6.2000e-004	194.9141

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4816	160.4816	7.9400e-003	0.0000	160.6802
Stationary	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Waste						0.0000	0.0000		0.0000	0.0000	4.3542	0.0000	4.3542	0.2573	0.0000	10.7872
Water						0.0000	0.0000		0.0000	0.0000	0.2442	3.2749	3.5191	0.0252	6.2000e-004	4.3339
Total	1.4840	0.3442	0.5732	1.9400e-003	0.1571	7.4800e-003	0.1646	0.0421	7.3900e-003	0.0495	4.5983	182.8021	187.4005	0.2932	6.2000e-004	194.9141

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	7/17/2019	5	42	
2	Finish Grading	Grading	7/18/2019	12/4/2019	5	100	
3	Building Construction	Building Construction	12/5/2019	6/16/2021	5	400	
4	Paving	Paving	6/17/2021	6/25/2021	5	7	
5	Architectural Coating	Architectural Coating	6/26/2021	11/12/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2581	0.0000	0.2581	0.1396	0.0000	0.1396	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1894	2.1843	1.1923	2.4500e-003		0.0913	0.0913		0.0840	0.0840	0.0000	219.2426	219.2426	0.0691	0.0000	220.9698
Total	0.1894	2.1843	1.1923	2.4500e-003	0.2581	0.0913	0.3493	0.1396	0.0840	0.2236	0.0000	219.2426	219.2426	0.0691	0.0000	220.9698

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3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.2900e-003	0.0221	6.0000e-005	6.0600e-003	4.0000e-005	6.1100e-003	1.6100e-003	4.0000e-005	1.6500e-003	0.0000	5.6586	5.6586	1.8000e-004	0.0000	5.6632
Total	7.9200e-003	0.1747	0.0597	5.0000e-004	0.0157	6.8000e-004	0.0164	4.2500e-003	6.6000e-004	4.9100e-003	0.0000	49.5108	49.5108	4.1500e-003	0.0000	49.6146

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1161	0.0000	0.1161	0.0628	0.0000	0.0628	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0596	1.1627	1.3443	2.4500e-003		0.0470	0.0470		0.0470	0.0470	0.0000	219.2424	219.2424	0.0691	0.0000	220.9696
Total	0.0596	1.1627	1.3443	2.4500e-003	0.1161	0.0470	0.1631	0.0628	0.0470	0.1098	0.0000	219.2424	219.2424	0.0691	0.0000	220.9696

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3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.2900e-003	0.0221	6.0000e-005	6.0600e-003	4.0000e-005	6.1100e-003	1.6100e-003	4.0000e-005	1.6500e-003	0.0000	5.6586	5.6586	1.8000e-004	0.0000	5.6632
Total	7.9200e-003	0.1747	0.0597	5.0000e-004	0.0157	6.8000e-004	0.0164	4.2500e-003	6.6000e-004	4.9100e-003	0.0000	49.5108	49.5108	4.1500e-003	0.0000	49.6146

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1400e-003	0.0000	5.1400e-003	5.8000e-004	0.0000	5.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1404	1.5930	0.9461	2.1100e-003		0.0655	0.0655		0.0604	0.0604	0.0000	188.2053	188.2053	0.0589	0.0000	189.6773
Total	0.1404	1.5930	0.9461	2.1100e-003	5.1400e-003	0.0655	0.0707	5.8000e-004	0.0604	0.0609	0.0000	188.2053	188.2053	0.0589	0.0000	189.6773

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3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5500e-003	2.7200e-003	0.0263	7.0000e-005	7.2200e-003	5.0000e-005	7.2700e-003	1.9200e-003	5.0000e-005	1.9700e-003	0.0000	6.7365	6.7365	2.2000e-004	0.0000	6.7419
Total	8.4900e-003	0.1751	0.0639	5.1000e-004	0.0169	6.9000e-004	0.0175	4.5600e-003	6.7000e-004	5.2300e-003	0.0000	50.5887	50.5887	4.1900e-003	0.0000	50.6933

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3100e-003	0.0000	2.3100e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0505	1.0032	1.1642	2.1100e-003		0.0436	0.0436		0.0436	0.0436	0.0000	188.2050	188.2050	0.0589	0.0000	189.6771
Total	0.0505	1.0032	1.1642	2.1100e-003	2.3100e-003	0.0436	0.0459	2.6000e-004	0.0436	0.0439	0.0000	188.2050	188.2050	0.0589	0.0000	189.6771

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3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9400e-003	0.1724	0.0376	4.4000e-004	9.6300e-003	6.4000e-004	0.0103	2.6400e-003	6.2000e-004	3.2600e-003	0.0000	43.8522	43.8522	3.9700e-003	0.0000	43.9515
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5500e-003	2.7200e-003	0.0263	7.0000e-005	7.2200e-003	5.0000e-005	7.2700e-003	1.9200e-003	5.0000e-005	1.9700e-003	0.0000	6.7365	6.7365	2.2000e-004	0.0000	6.7419
Total	8.4900e-003	0.1751	0.0639	5.1000e-004	0.0169	6.9000e-004	0.0175	4.5600e-003	6.7000e-004	5.2300e-003	0.0000	50.5887	50.5887	4.1900e-003	0.0000	50.6933

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0294	0.2721	0.2014	3.3000e-004		0.0149	0.0149		0.0139	0.0139	0.0000	28.6724	28.6724	8.5400e-003	0.0000	28.8858
Total	0.0294	0.2721	0.2014	3.3000e-004		0.0149	0.0149		0.0139	0.0139	0.0000	28.6724	28.6724	8.5400e-003	0.0000	28.8858

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-003	0.0644	0.0173	1.4000e-004	3.4100e-003	4.5000e-004	3.8500e-003	9.8000e-004	4.3000e-004	1.4100e-003	0.0000	13.6293	13.6293	1.0900e-003	0.0000	13.6566
Worker	5.0900e-003	3.9100e-003	0.0378	1.1000e-004	0.0104	8.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.6706	9.6706	3.1000e-004	0.0000	9.6784
Total	7.4900e-003	0.0683	0.0551	2.5000e-004	0.0138	5.3000e-004	0.0143	3.7300e-003	5.0000e-004	4.2300e-003	0.0000	23.2999	23.2999	1.4000e-003	0.0000	23.3350

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8700e-003	0.1793	0.2153	3.3000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	28.6724	28.6724	8.5400e-003	0.0000	28.8858
Total	8.8700e-003	0.1793	0.2153	3.3000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	28.6724	28.6724	8.5400e-003	0.0000	28.8858

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-003	0.0644	0.0173	1.4000e-004	3.4100e-003	4.5000e-004	3.8500e-003	9.8000e-004	4.3000e-004	1.4100e-003	0.0000	13.6293	13.6293	1.0900e-003	0.0000	13.6566
Worker	5.0900e-003	3.9100e-003	0.0378	1.1000e-004	0.0104	8.0000e-005	0.0104	2.7500e-003	7.0000e-005	2.8200e-003	0.0000	9.6706	9.6706	3.1000e-004	0.0000	9.6784
Total	7.4900e-003	0.0683	0.0551	2.5000e-004	0.0138	5.3000e-004	0.0143	3.7300e-003	5.0000e-004	4.2300e-003	0.0000	23.2999	23.2999	1.4000e-003	0.0000	23.3350

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3659	3.4297	2.7065	4.5200e-003		0.1797	0.1797		0.1672	0.1672	0.0000	387.8390	387.8390	0.1168	0.0000	390.7583
Total	0.3659	3.4297	2.7065	4.5200e-003		0.1797	0.1797		0.1672	0.1672	0.0000	387.8390	387.8390	0.1168	0.0000	390.7583

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0270	0.8063	0.2142	1.9200e-003	0.0470	3.9300e-003	0.0509	0.0136	3.7600e-003	0.0173	0.0000	186.6556	186.6556	0.0143	0.0000	187.0133
Worker	0.0657	0.0486	0.4767	1.4300e-003	0.1429	1.0300e-003	0.1439	0.0380	9.5000e-004	0.0389	0.0000	129.1438	129.1438	3.8800e-003	0.0000	129.2408
Total	0.0926	0.8549	0.6910	3.3500e-003	0.1898	4.9600e-003	0.1948	0.0515	4.7100e-003	0.0562	0.0000	315.7994	315.7994	0.0182	0.0000	316.2540

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1223	2.4730	2.9686	4.5200e-003		0.1460	0.1460		0.1460	0.1460	0.0000	387.8385	387.8385	0.1168	0.0000	390.7579
Total	0.1223	2.4730	2.9686	4.5200e-003		0.1460	0.1460		0.1460	0.1460	0.0000	387.8385	387.8385	0.1168	0.0000	390.7579

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0270	0.8063	0.2142	1.9200e-003	0.0470	3.9300e-003	0.0509	0.0136	3.7600e-003	0.0173	0.0000	186.6556	186.6556	0.0143	0.0000	187.0133
Worker	0.0657	0.0486	0.4767	1.4300e-003	0.1429	1.0300e-003	0.1439	0.0380	9.5000e-004	0.0389	0.0000	129.1438	129.1438	3.8800e-003	0.0000	129.2408
Total	0.0926	0.8549	0.6910	3.3500e-003	0.1898	4.9600e-003	0.1948	0.0515	4.7100e-003	0.0562	0.0000	315.7994	315.7994	0.0182	0.0000	316.2540

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1498	1.4230	1.2024	2.0500e-003		0.0709	0.0709		0.0659	0.0659	0.0000	176.1670	176.1670	0.0527	0.0000	177.4832
Total	0.1498	1.4230	1.2024	2.0500e-003		0.0709	0.0709		0.0659	0.0659	0.0000	176.1670	176.1670	0.0527	0.0000	177.4832

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3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9300e-003	0.3302	0.0881	8.6000e-004	0.0213	7.0000e-004	0.0220	6.1600e-003	6.7000e-004	6.8300e-003	0.0000	84.0007	84.0007	6.2300e-003	0.0000	84.1565
Worker	0.0281	0.0201	0.2022	6.3000e-004	0.0649	4.6000e-004	0.0654	0.0172	4.2000e-004	0.0177	0.0000	56.6863	56.6863	1.6200e-003	0.0000	56.7269
Total	0.0381	0.3503	0.2902	1.4900e-003	0.0862	1.1600e-003	0.0874	0.0234	1.0900e-003	0.0245	0.0000	140.6870	140.6870	7.8500e-003	0.0000	140.8835

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0556	1.1232	1.3484	2.0500e-003		0.0663	0.0663		0.0663	0.0663	0.0000	176.1668	176.1668	0.0527	0.0000	177.4830
Total	0.0556	1.1232	1.3484	2.0500e-003		0.0663	0.0663		0.0663	0.0663	0.0000	176.1668	176.1668	0.0527	0.0000	177.4830

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9300e-003	0.3302	0.0881	8.6000e-004	0.0213	7.0000e-004	0.0220	6.1600e-003	6.7000e-004	6.8300e-003	0.0000	84.0007	84.0007	6.2300e-003	0.0000	84.1565
Worker	0.0281	0.0201	0.2022	6.3000e-004	0.0649	4.6000e-004	0.0654	0.0172	4.2000e-004	0.0177	0.0000	56.6863	56.6863	1.6200e-003	0.0000	56.7269
Total	0.0381	0.3503	0.2902	1.4900e-003	0.0862	1.1600e-003	0.0874	0.0234	1.0900e-003	0.0245	0.0000	140.6870	140.6870	7.8500e-003	0.0000	140.8835

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9500e-003	0.0824	0.0860	1.6000e-004		4.2200e-003	4.2200e-003		3.9400e-003	3.9400e-003	0.0000	13.8361	13.8361	3.9400e-003	0.0000	13.9345
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9500e-003	0.0824	0.0860	1.6000e-004		4.2200e-003	4.2200e-003		3.9400e-003	3.9400e-003	0.0000	13.8361	13.8361	3.9400e-003	0.0000	13.9345

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3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.1000e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5884	0.5884	2.0000e-005	0.0000	0.5889
Total	2.9000e-004	2.1000e-004	2.1000e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5884	0.5884	2.0000e-005	0.0000	0.5889

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.7700e-003	0.0780	0.1057	1.6000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	13.8360	13.8360	3.9400e-003	0.0000	13.9345
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7700e-003	0.0780	0.1057	1.6000e-004		4.2700e-003	4.2700e-003		4.2700e-003	4.2700e-003	0.0000	13.8360	13.8360	3.9400e-003	0.0000	13.9345

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3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-004	2.1000e-004	2.1000e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5884	0.5884	2.0000e-005	0.0000	0.5889
Total	2.9000e-004	2.1000e-004	2.1000e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5884	0.5884	2.0000e-005	0.0000	0.5889

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8700e-003	0.0300	0.0547	8.0000e-005		5.7000e-004	5.7000e-004		5.3000e-004	5.3000e-004	0.0000	7.3763	7.3763	2.3900e-003	0.0000	7.4360
Total	1.4965	0.0300	0.0547	8.0000e-005		5.7000e-004	5.7000e-004		5.3000e-004	5.3000e-004	0.0000	7.3763	7.3763	2.3900e-003	0.0000	7.4360

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3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8700e-003	3.4700e-003	0.0350	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9800e-003	7.0000e-005	3.0600e-003	0.0000	9.8073	9.8073	2.8000e-004	0.0000	9.8143
Total	4.8700e-003	3.4700e-003	0.0350	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9800e-003	7.0000e-005	3.0600e-003	0.0000	9.8073	9.8073	2.8000e-004	0.0000	9.8143

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4946					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0472	0.0637	8.0000e-005		3.3100e-003	3.3100e-003		3.3100e-003	3.3100e-003	0.0000	7.3763	7.3763	2.3900e-003	0.0000	7.4359
Total	1.4967	0.0472	0.0637	8.0000e-005		3.3100e-003	3.3100e-003		3.3100e-003	3.3100e-003	0.0000	7.3763	7.3763	2.3900e-003	0.0000	7.4359

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3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8700e-003	3.4700e-003	0.0350	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9800e-003	7.0000e-005	3.0600e-003	0.0000	9.8073	9.8073	2.8000e-004	0.0000	9.8143
Total	4.8700e-003	3.4700e-003	0.0350	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9800e-003	7.0000e-005	3.0600e-003	0.0000	9.8073	9.8073	2.8000e-004	0.0000	9.8143

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4816	160.4816	7.9400e-003	0.0000	160.6802
Unmitigated	0.0338	0.1607	0.4656	1.7400e-003	0.1571	1.4300e-003	0.1586	0.0421	1.3400e-003	0.0434	0.0000	160.4816	160.4816	7.9400e-003	0.0000	160.6802

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Unmitigated	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Total	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.8000e-004	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003
Total	1.4091	3.0000e-005	2.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.7600e-003	5.7600e-003	2.0000e-005	0.0000	6.1400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.5191	0.0252	6.2000e-004	4.3339
Unmitigated	3.5191	0.0252	6.2000e-004	4.3339

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.7696 / 0	3.5191	0.0252	6.2000e-004	4.3339
Total		3.5191	0.0252	6.2000e-004	4.3339

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.7696 / 0	3.5191	0.0252	6.2000e-004	4.3339
Total		3.5191	0.0252	6.2000e-004	4.3339

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.3542	0.2573	0.0000	10.7872
Unmitigated	4.3542	0.2573	0.0000	10.7872

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	21.45	4.3542	0.2573	0.0000	10.7872
Total		4.3542	0.2573	0.0000	10.7872

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	21.45	4.3542	0.2573	0.0000	10.7872
Total		4.3542	0.2573	0.0000	10.7872

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (750 - 9999 HP)	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066
Total	0.0410	0.1835	0.1046	2.0000e-004		6.0400e-003	6.0400e-003		6.0400e-003	6.0400e-003	0.0000	19.0399	19.0399	2.6700e-003	0.0000	19.1066

11.0 Vegetation

NCPWF SVR - San Diego County APCD Air District, Summer

NCPWF SVR

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	210.00	8.50
tblGrading	AcresOfGrading	150.00	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

NCPWF SVR - San Diego County APCD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00

NCPWF SVR - San Diego County APCD Air District, Summer

tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

NCPWF SVR - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	9.3940	112.1565	59.6269	0.1409	13.0527	4.3787	17.4314	6.8549	4.0311	10.8860	0.0000	14,139.77 12	14,139.77 12	3.8416	0.0000	14,235.811 0
2020	3.4943	32.6057	26.0662	0.0608	1.4828	1.4095	2.8923	0.4016	1.3118	1.7133	0.0000	5,997.458 4	5,997.458 4	1.1340	0.0000	6,025.807 6
2021	30.0272	29.7205	25.2170	0.0603	1.4828	1.2104	2.6932	0.4016	1.1280	1.5274	0.0000	5,944.652 4	5,944.652 4	1.2456	0.0000	5,972.637 5
Maximum	30.0272	112.1565	59.6269	0.1409	13.0527	4.3787	17.4314	6.8549	4.0311	10.8860	0.0000	14,139.77 12	14,139.77 12	3.8416	0.0000	14,235.81 10

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.2102	63.5125	66.8626	0.1409	6.2938	2.2696	8.5634	3.1984	2.2681	5.4665	0.0000	14,139.77 12	14,139.77 12	3.8416	0.0000	14,235.811 0
2020	1.6348	25.3030	28.0676	0.0608	1.4828	1.1518	2.6346	0.4016	1.1499	1.5515	0.0000	5,997.458 4	5,997.458 4	1.1340	0.0000	6,025.807 6
2021	30.0310	24.6822	30.8469	0.0603	1.4828	1.2215	2.6162	0.4016	1.2214	1.5339	0.0000	5,944.652 4	5,944.652 4	1.2456	0.0000	5,972.637 5
Maximum	30.0310	63.5125	66.8626	0.1409	6.2938	2.2696	8.5634	3.1984	2.2681	5.4665	0.0000	14,139.77 12	14,139.77 12	3.8416	0.0000	14,235.81 10

NCPWF SVR - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	18.73	34.95	-13.40	0.00	42.20	33.66	39.98	47.75	28.30	39.46	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4938	61.5153	42.3261	0.0960	2.9120	1.9572	4.8692	0.7783	1.9555	2.7338		10,059.5348	10,059.5348	1.1023	0.0000	10,087.0916

NCPWF SVR - San Diego County APCD Air District, Summer

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4938	61.5153	42.3261	0.0960	2.9120	1.9572	4.8692	0.7783	1.9555	2.7338		10,059.5348	10,059.5348	1.1023	0.0000	10,087.0916

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

NCPWF SVR - San Diego County APCD Air District, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	7/17/2019	5	42	
2	Finish Grading	Grading	7/18/2019	12/4/2019	5	100	
3	Building Construction	Building Construction	12/5/2019	6/16/2021	5	400	
4	Paving	Paving	6/17/2021	6/25/2021	5	7	
5	Architectural Coating	Architectural Coating	6/26/2021	11/12/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF SVR - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

Trips and VMT

NCPWF SVR - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2889	0.0000	12.2889	6.6482	0.0000	6.6482			0.0000			0.0000
Off-Road	9.0201	104.0122	56.7763	0.1165		4.3462	4.3462		4.0001	4.0001		11,508.268	11,508.268	3.6264		11,598.927
Total	9.0201	104.0122	56.7763	0.1165	12.2889	4.3462	16.6351	6.6482	4.0001	10.6483		11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF SVR - San Diego County APCD Air District, Summer

3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2325	8.0457	1.7368	0.0213	0.4681	0.0304	0.4984	0.1283	0.0291	0.1573		2,318.2305	2,318.2305	0.2052		2,323.3593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1414	0.0987	1.1139	3.1500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		313.2719	313.2719	0.0100		313.5220
Total	0.3739	8.1444	2.8507	0.0244	0.7638	0.0325	0.7963	0.2067	0.0310	0.2377		2,631.5024	2,631.5024	0.2152		2,636.8813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5300	0.0000	5.5300	2.9917	0.0000	2.9917			0.0000			0.0000
Off-Road	2.8364	55.3681	64.0120	0.1165		2.2371	2.2371		2.2371	2.2371	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297
Total	2.8364	55.3681	64.0120	0.1165	5.5300	2.2371	7.7671	2.9917	2.2371	5.2288	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF SVR - San Diego County APCD Air District, Summer

3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2325	8.0457	1.7368	0.0213	0.4681	0.0304	0.4984	0.1283	0.0291	0.1573		2,318.2305	2,318.2305	0.2052		2,323.3593
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1414	0.0987	1.1139	3.1500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		313.2719	313.2719	0.0100		313.5220
Total	0.3739	8.1444	2.8507	0.0244	0.7638	0.0325	0.7963	0.2067	0.0310	0.2377		2,631.5024	2,631.5024	0.2152		2,636.8813

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1028	0.0000	0.1028	0.0117	0.0000	0.0117			0.0000			0.0000
Off-Road	2.8077	31.8604	18.9226	0.0422		1.3102	1.3102		1.2070	1.2070		4,149.2157	4,149.2157	1.2981		4,181.6684
Total	2.8077	31.8604	18.9226	0.0422	0.1028	1.3102	1.4130	0.0117	1.2070	1.2186		4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF SVR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0977	3.3792	0.7294	8.9300e-003	0.1966	0.0128	0.2093	0.0539	0.0122	0.0661		973.6568	973.6568	0.0862		975.8109
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0493	0.5569	1.5700e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		156.6359	156.6359	5.0000e-003		156.7610
Total	0.1683	3.4285	1.2864	0.0105	0.3445	0.0138	0.3583	0.0931	0.0132	0.1063		1,130.2927	1,130.2927	0.0912		1,132.5719

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0463	0.0000	0.0463	5.2400e-003	0.0000	5.2400e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684
Total	1.0103	20.0646	23.2829	0.0422	0.0463	0.8726	0.9188	5.2400e-003	0.8726	0.8778	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF SVR - San Diego County APCD Air District, Summer

3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0977	3.3792	0.7294	8.9300e-003	0.1966	0.0128	0.2093	0.0539	0.0122	0.0661		973.6568	973.6568	0.0862		975.8109
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0707	0.0493	0.5569	1.5700e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		156.6359	156.6359	5.0000e-003		156.7610
Total	0.1683	3.4285	1.2864	0.0105	0.3445	0.0138	0.3583	0.0931	0.0132	0.1063		1,130.2927	1,130.2927	0.0912		1,132.5719

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0984	28.6373	21.1943	0.0345		1.5701	1.5701		1.4604	1.4604		3,326.9359	3,326.9359	0.9907		3,351.7031
Total	3.0984	28.6373	21.1943	0.0345		1.5701	1.5701		1.4604	1.4604		3,326.9359	3,326.9359	0.9907		3,351.7031

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2485	6.6953	1.7285	0.0149	0.3656	0.0466	0.4121	0.1052	0.0446	0.1498		1,598.4898	1,598.4898	0.1234		1,601.5751
Worker	0.5340	0.3727	4.2080	0.0119	1.1172	7.9600e-003	1.1252	0.2963	7.3400e-003	0.3037		1,183.4715	1,183.4715	0.0378		1,184.4163
Total	0.7825	7.0680	5.9365	0.0268	1.4828	0.0545	1.5373	0.4016	0.0519	0.4535		2,781.9613	2,781.9613	0.1612		2,785.9914

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,326.9359	3,326.9359	0.9907		3,351.7031
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,326.9359	3,326.9359	0.9907		3,351.7031

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2485	6.6953	1.7285	0.0149	0.3656	0.0466	0.4121	0.1052	0.0446	0.1498		1,598.4898	1,598.4898	0.1234		1,601.5751
Worker	0.5340	0.3727	4.2080	0.0119	1.1172	7.9600e-003	1.1252	0.2963	7.3400e-003	0.3037		1,183.4715	1,183.4715	0.0378		1,184.4163
Total	0.7825	7.0680	5.9365	0.0268	1.4828	0.0545	1.5373	0.4016	0.0519	0.4535		2,781.9613	2,781.9613	0.1612		2,785.9914

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713
Total	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2018	6.0889	1.5512	0.0148	0.3656	0.0298	0.3954	0.1052	0.0285	0.1337		1,587.8164	1,587.8164	0.1171		1,590.7448
Worker	0.4991	0.3363	3.8550	0.0115	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,146.1360	1,146.1360	0.0342		1,146.9916
Total	0.7009	6.4252	5.4063	0.0263	1.4828	0.0376	1.5204	0.4016	0.0357	0.4373		2,733.9524	2,733.9524	0.1514		2,737.7363

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2018	6.0889	1.5512	0.0148	0.3656	0.0298	0.3954	0.1052	0.0285	0.1337		1,587.816 4	1,587.816 4	0.1171		1,590.744 8
Worker	0.4991	0.3363	3.8550	0.0115	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,146.136 0	1,146.136 0	0.0342		1,146.991 6
Total	0.7009	6.4252	5.4063	0.0263	1.4828	0.0376	1.5204	0.4016	0.0357	0.4373		2,733.952 4	2,733.952 4	0.1514		2,737.736 3

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.712 3	3,263.712 3	0.9754		3,288.096 7
Total	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.712 3	3,263.712 3	0.9754		3,288.096 7

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1633	5.4988	1.4013	0.0146	0.3656	0.0116	0.3771	0.1052	0.0110	0.1163		1,573.3005	1,573.3005	0.1124		1,576.1109
Worker	0.4704	0.3056	3.6072	0.0111	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,107.6396	1,107.6396	0.0316		1,108.4299
Total	0.6337	5.8044	5.0085	0.0257	1.4828	0.0193	1.5020	0.4016	0.0182	0.4197		2,680.9401	2,680.9401	0.1440		2,684.5408

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.7123	3,263.7123	0.9754		3,288.0967
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.7123	3,263.7123	0.9754		3,288.0967

NCPWF SVR - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1633	5.4988	1.4013	0.0146	0.3656	0.0116	0.3771	0.1052	0.0110	0.1163		1,573.3005	1,573.3005	0.1124		1,576.1109
Worker	0.4704	0.3056	3.6072	0.0111	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,107.6396	1,107.6396	0.0316		1,108.4299
Total	0.6337	5.8044	5.0085	0.0257	1.4828	0.0193	1.5020	0.4016	0.0182	0.4197		2,680.9401	2,680.9401	0.1440		2,684.5408

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5561	23.5289	24.5761	0.0452		1.2067	1.2067		1.1268	1.1268		4,357.6084	4,357.6084	1.2400		4,388.6089
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5561	23.5289	24.5761	0.0452		1.2067	1.2067		1.1268	1.1268		4,357.6084	4,357.6084	1.2400		4,388.6089

NCPWF SVR - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6366	1.9600e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		195.4658	195.4658	5.5800e-003		195.6053
Total	0.0830	0.0539	0.6366	1.9600e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		195.4658	195.4658	5.5800e-003		195.6053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,357.6084	4,357.6084	1.2400		4,388.6089
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,357.6084	4,357.6084	1.2400		4,388.6089

NCPWF SVR - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0830	0.0539	0.6366	1.9600e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		195.4658	195.4658	5.5800e-003		195.6053
Total	0.0830	0.0539	0.6366	1.9600e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		195.4658	195.4658	5.5800e-003		195.6053

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8928					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0375	0.6006	1.0941	1.6800e-003		0.0115	0.0115		0.0105	0.0105		162.6199	162.6199	0.0526		163.9347
Total	29.9303	0.6006	1.0941	1.6800e-003		0.0115	0.0115		0.0105	0.0105		162.6199	162.6199	0.0526		163.9347

NCPWF SVR - San Diego County APCD Air District, Summer

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062
Total	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8928					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0413	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347
Total	29.9342	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347

NCPWF SVR - San Diego County APCD Air District, Summer

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062
Total	0.0969	0.0629	0.7427	2.2900e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		228.0435	228.0435	6.5100e-003		228.2062

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF SVR - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634
Unmitigated	0.6424	2.8050	8.8181	0.0329	2.9120	0.0259	2.9378	0.7783	0.0242	0.8024		3,343.3513	3,343.3513	0.1605		3,347.3634

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

NCPWF SVR - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF SVR - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

NCPWF SVR - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Unmitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

NCPWF SVR - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCPWF SVR - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530

11.0 Vegetation

NCPWF SVR - San Diego County APCD Air District, Winter

NCPWF SVR

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	322.47	1000sqft	7.40	322,468.42	37

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

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On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - CalEEMod defaults.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - See section 7.2.2 for additional information on the emergency generator.

Stationary Sources - Process Boilers - No stationary sources.

NCPWF SVR - San Diego County APCD Air District, Winter

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - CalEEMod defaults.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	210.00	8.50
tblGrading	AcresOfGrading	150.00	8.50
tblGrading	MaterialExported	0.00	9,000.00
tblGrading	MaterialExported	0.00	9,000.00
tblLandUse	BuildingSpaceSquareFeet	322,470.00	322,468.42
tblLandUse	LandUseSquareFeet	322,470.00	322,468.42
tblLandUse	Population	0.00	37.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

NCPWF SVR - San Diego County APCD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	399.86	21.45
tblTripsAndVMT	VendorTripNumber	53.00	54.00
tblTripsAndVMT	WorkerTripNumber	35.00	36.00
tblTripsAndVMT	WorkerTripNumber	135.00	136.00
tblTripsAndVMT	WorkerTripNumber	23.00	24.00
tblTripsAndVMT	WorkerTripNumber	27.00	28.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.63
tblVehicleTrips	SU_TR	0.68	1.00

NCPWF SVR - San Diego County APCD Air District, Winter

tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	74,571,187.50	769,600.00

2.0 Emissions Summary

NCPWF SVR - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	9.4191	112.2511	59.6901	0.1403	13.0527	4.3794	17.4321	6.8549	4.0317	10.8866	0.0000	14,081.5779	14,081.5779	3.8485	0.0000	14,177.7905
2020	3.5700	32.6421	26.0160	0.0597	1.4828	1.4101	2.8929	0.4016	1.3123	1.7139	0.0000	5,886.3414	5,886.3414	1.1395	0.0000	5,914.8284
2021	30.0401	29.7433	25.1744	0.0592	1.4828	1.2109	2.6936	0.4016	1.1280	1.5278	0.0000	5,836.1212	5,836.1212	1.2453	0.0000	5,864.2374
Maximum	30.0401	112.2511	59.6901	0.1403	13.0527	4.3794	17.4321	6.8549	4.0317	10.8866	0.0000	14,081.5779	14,081.5779	3.8485	0.0000	14,177.7905

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.2353	63.6071	66.9258	0.1403	6.2938	2.2703	8.5641	3.1984	2.2688	5.4672	0.0000	14,081.5779	14,081.5779	3.8485	0.0000	14,177.7905
2020	1.7105	25.3394	28.0174	0.0597	1.4828	1.1524	2.6351	0.4016	1.1504	1.5520	0.0000	5,886.3414	5,886.3414	1.1395	0.0000	5,914.8284
2021	30.0440	24.7050	30.8087	0.0592	1.4828	1.2215	2.6167	0.4016	1.2214	1.5343	0.0000	5,836.1212	5,836.1212	1.2453	0.0000	5,864.2374
Maximum	30.0440	63.6071	66.9258	0.1403	6.2938	2.2703	8.5641	3.1984	2.2688	5.4672	0.0000	14,081.5779	14,081.5779	3.8485	0.0000	14,177.7905

NCPWF SVR - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	18.68	34.92	-13.41	0.00	42.20	33.66	39.98	47.75	28.30	39.46	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4756	61.6139	41.9738	0.0943	2.9120	1.9573	4.8693	0.7783	1.9556	2.7339		9,890.2790	9,890.2790	1.1013	0.0000	9,917.8118

NCPWF SVR - San Diego County APCD Air District, Winter

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Stationary	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313		6,716.1130	6,716.1130	0.9416		6,739.6530
Total	21.4756	61.6139	41.9738	0.0943	2.9120	1.9573	4.8693	0.7783	1.9556	2.7339		9,890.2790	9,890.2790	1.1013	0.0000	9,917.8118

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

NCPWF SVR - San Diego County APCD Air District, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Mass Grading	Grading	5/21/2019	7/17/2019	5	42	
2	Finish Grading	Grading	7/18/2019	12/4/2019	5	100	
3	Building Construction	Building Construction	12/5/2019	6/16/2021	5	400	
4	Paving	Paving	6/17/2021	6/25/2021	5	7	
5	Architectural Coating	Architectural Coating	6/26/2021	11/12/2021	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 483,703; Non-Residential Outdoor: 161,234; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF SVR - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	2	8.00	187	0.41
Mass Grading	Off-Highway Trucks	1	8.00	402	0.38
Mass Grading	Plate Compactors	2	8.00	8	0.43
Mass Grading	Rubber Tired Dozers	2	8.00	247	0.40
Mass Grading	Scrapers	4	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Finish Grading	Graders	1	8.00	187	0.41
Finish Grading	Off-Highway Trucks	1	8.00	402	0.38
Finish Grading	Plate Compactors	2	8.00	8	0.43
Finish Grading	Scrapers	1	8.00	367	0.48
Finish Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	2	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Aerial Lifts	1	8.00	63	0.31

Trips and VMT

NCPWF SVR - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Mass Grading	14	36.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Finish Grading	7	18.00	0.00	1,125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	136.00	54.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	24.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	28.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Mass Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.2889	0.0000	12.2889	6.6482	0.0000	6.6482			0.0000			0.0000
Off-Road	9.0201	104.0122	56.7763	0.1165		4.3462	4.3462		4.0001	4.0001		11,508.268	11,508.268	3.6264		11,598.927
Total	9.0201	104.0122	56.7763	0.1165	12.2889	4.3462	16.6351	6.6482	4.0001	10.6483		11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF SVR - San Diego County APCD Air District, Winter

3.2 Mass Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2391	8.1282	1.8612	0.0209	0.4681	0.0311	0.4991	0.1283	0.0297	0.1580		2,279.2201	2,279.2201	0.2126		2,284.5346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1599	0.1108	1.0526	2.9500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		294.0890	294.0890	9.4900e-003		294.3262
Total	0.3989	8.2389	2.9139	0.0239	0.7638	0.0332	0.7970	0.2067	0.0317	0.2384		2,573.3091	2,573.3091	0.2221		2,578.8608

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5300	0.0000	5.5300	2.9917	0.0000	2.9917			0.0000			0.0000
Off-Road	2.8364	55.3681	64.0120	0.1165		2.2371	2.2371		2.2371	2.2371	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297
Total	2.8364	55.3681	64.0120	0.1165	5.5300	2.2371	7.7671	2.9917	2.2371	5.2288	0.0000	11,508.2688	11,508.2688	3.6264		11,598.9297

NCPWF SVR - San Diego County APCD Air District, Winter

3.2 Mass Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2391	8.1282	1.8612	0.0209	0.4681	0.0311	0.4991	0.1283	0.0297	0.1580		2,279.2201	2,279.2201	0.2126		2,284.5346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1599	0.1108	1.0526	2.9500e-003	0.2957	2.1100e-003	0.2978	0.0784	1.9400e-003	0.0804		294.0890	294.0890	9.4900e-003		294.3262
Total	0.3989	8.2389	2.9139	0.0239	0.7638	0.0332	0.7970	0.2067	0.0317	0.2384		2,573.3091	2,573.3091	0.2221		2,578.8608

3.3 Finish Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1028	0.0000	0.1028	0.0117	0.0000	0.0117			0.0000			0.0000
Off-Road	2.8077	31.8604	18.9226	0.0422		1.3102	1.3102		1.2070	1.2070		4,149.2157	4,149.2157	1.2981		4,181.6684
Total	2.8077	31.8604	18.9226	0.0422	0.1028	1.3102	1.4130	0.0117	1.2070	1.2186		4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF SVR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1004	3.4138	0.7817	8.7800e-003	0.1966	0.0131	0.2096	0.0539	0.0125	0.0664		957.2725	957.2725	0.0893		959.5045
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	0.1803	3.4692	1.3080	0.0103	0.3445	0.0141	0.3586	0.0931	0.0135	0.1066		1,104.3169	1,104.3169	0.0940		1,106.6676

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0463	0.0000	0.0463	5.2400e-003	0.0000	5.2400e-003			0.0000			0.0000
Off-Road	1.0103	20.0646	23.2829	0.0422		0.8726	0.8726		0.8726	0.8726	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684
Total	1.0103	20.0646	23.2829	0.0422	0.0463	0.8726	0.9188	5.2400e-003	0.8726	0.8778	0.0000	4,149.2157	4,149.2157	1.2981		4,181.6684

NCPWF SVR - San Diego County APCD Air District, Winter

3.3 Finish Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1004	3.4138	0.7817	8.7800e-003	0.1966	0.0131	0.2096	0.0539	0.0125	0.0664		957.2725	957.2725	0.0893		959.5045
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0799	0.0554	0.5263	1.4800e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		147.0445	147.0445	4.7400e-003		147.1631
Total	0.1803	3.4692	1.3080	0.0103	0.3445	0.0141	0.3586	0.0931	0.0135	0.1066		1,104.3169	1,104.3169	0.0940		1,106.6676

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.0984	28.6373	21.1943	0.0345		1.5701	1.5701		1.4604	1.4604		3,326.9359	3,326.9359	0.9907		3,351.7031
Total	3.0984	28.6373	21.1943	0.0345		1.5701	1.5701		1.4604	1.4604		3,326.9359	3,326.9359	0.9907		3,351.7031

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2592	6.7007	1.9165	0.0145	0.3656	0.0474	0.4130	0.1052	0.0454	0.1506		1,557.9014	1,557.9014	0.1313		1,561.1835
Worker	0.6040	0.4185	3.9766	0.0112	1.1172	7.9600e-003	1.1252	0.2963	7.3400e-003	0.3037		1,111.0027	1,111.0027	0.0359		1,111.8989
Total	0.8632	7.1193	5.8930	0.0257	1.4828	0.0554	1.5381	0.4016	0.0527	0.4543		2,668.9041	2,668.9041	0.1671		2,673.0825

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,326.9359	3,326.9359	0.9907		3,351.7031
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,326.9359	3,326.9359	0.9907		3,351.7031

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2592	6.7007	1.9165	0.0145	0.3656	0.0474	0.4130	0.1052	0.0454	0.1506		1,557.9014	1,557.9014	0.1313			1,561.1835
Worker	0.6040	0.4185	3.9766	0.0112	1.1172	7.9600e-003	1.1252	0.2963	7.3400e-003	0.3037		1,111.0027	1,111.0027	0.0359			1,111.8989
Total	0.8632	7.1193	5.8930	0.0257	1.4828	0.0554	1.5381	0.4016	0.0527	0.4543		2,668.9041	2,668.9041	0.1671			2,673.0825

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826			3,288.0713
Total	2.7935	26.1806	20.6600	0.0345		1.3719	1.3719		1.2760	1.2760		3,263.5060	3,263.5060	0.9826			3,288.0713

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2113	6.0840	1.7215	0.0144	0.3656	0.0304	0.3959	0.1052	0.0290	0.1343		1,546.8960	1,546.8960	0.1245		1,550.0078
Worker	0.5652	0.3775	3.6346	0.0108	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,075.9395	1,075.9395	0.0324		1,076.7493
Total	0.7766	6.4616	5.3561	0.0252	1.4828	0.0382	1.5210	0.4016	0.0363	0.4378		2,622.8354	2,622.8354	0.1569		2,626.7571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.5060	3,263.5060	0.9826		3,288.0713

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2113	6.0840	1.7215	0.0144	0.3656	0.0304	0.3959	0.1052	0.0290	0.1343		1,546.8960	1,546.8960	0.1245		1,550.0078
Worker	0.5652	0.3775	3.6346	0.0108	1.1172	7.8400e-003	1.1251	0.2963	7.2200e-003	0.3036		1,075.9395	1,075.9395	0.0324		1,076.7493
Total	0.7766	6.4616	5.3561	0.0252	1.4828	0.0382	1.5210	0.4016	0.0363	0.4378		2,622.8354	2,622.8354	0.1569		2,626.7571

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754		3,288.0967
Total	2.5183	23.9160	20.2085	0.0345		1.1911	1.1911		1.1077	1.1077		3,263.7123	3,263.7123	0.9754		3,288.0967

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1721	5.4842	1.5603	0.0143	0.3656	0.0120	0.3776	0.1052	0.0115	0.1167		1,532.624 2	1,532.624 2	0.1194		1,535.609 1
Worker	0.5335	0.3431	3.3908	0.0104	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,039.784 7	1,039.784 7	0.0299		1,040.531 5
Total	0.7056	5.8272	4.9511	0.0247	1.4828	0.0197	1.5025	0.4016	0.0186	0.4202		2,572.408 9	2,572.408 9	0.1493		2,576.140 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.712 3	3,263.712 3	0.9754		3,288.096 7
Total	0.9339	18.8778	22.6613	0.0345		1.1142	1.1142		1.1142	1.1142	0.0000	3,263.712 3	3,263.712 3	0.9754		3,288.096 7

NCPWF SVR - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1721	5.4842	1.5603	0.0143	0.3656	0.0120	0.3776	0.1052	0.0115	0.1167		1,532.624 2	1,532.624 2	0.1194		1,535.609 1
Worker	0.5335	0.3431	3.3908	0.0104	1.1172	7.7200e-003	1.1249	0.2963	7.1100e-003	0.3034		1,039.784 7	1,039.784 7	0.0299		1,040.531 5
Total	0.7056	5.8272	4.9511	0.0247	1.4828	0.0197	1.5025	0.4016	0.0186	0.4202		2,572.408 9	2,572.408 9	0.1493		2,576.140 6

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5561	23.5289	24.5761	0.0452		1.2067	1.2067		1.1268	1.1268		4,357.608 4	4,357.608 4	1.2400		4,388.608 9
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.5561	23.5289	24.5761	0.0452		1.2067	1.2067		1.1268	1.1268		4,357.608 4	4,357.608 4	1.2400		4,388.608 9

NCPWF SVR - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0941	0.0605	0.5984	1.8400e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		183.4914	183.4914	5.2700e-003		183.6232
Total	0.0941	0.0605	0.5984	1.8400e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		183.4914	183.4914	5.2700e-003		183.6232

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,357.6084	4,357.6084	1.2400		4,388.6089
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0759	22.2742	30.2103	0.0452		1.2201	1.2201		1.2201	1.2201	0.0000	4,357.6084	4,357.6084	1.2400		4,388.6089

NCPWF SVR - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0941	0.0605	0.5984	1.8400e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		183.4914	183.4914	5.2700e-003		183.6232
Total	0.0941	0.0605	0.5984	1.8400e-003	0.1972	1.3600e-003	0.1985	0.0523	1.2500e-003	0.0536		183.4914	183.4914	5.2700e-003		183.6232

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8928					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0375	0.6006	1.0941	1.6800e-003		0.0115	0.0115		0.0105	0.0105		162.6199	162.6199	0.0526		163.9347
Total	29.9303	0.6006	1.0941	1.6800e-003		0.0115	0.0115		0.0105	0.0105		162.6199	162.6199	0.0526		163.9347

NCPWF SVR - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1098	0.0706	0.6981	2.1500e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		214.0733	214.0733	6.1500e-003		214.2271
Total	0.1098	0.0706	0.6981	2.1500e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		214.0733	214.0733	6.1500e-003		214.2271

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	29.8928					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0413	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347
Total	29.9342	0.9438	1.2745	1.6800e-003		0.0661	0.0661		0.0661	0.0661	0.0000	162.6199	162.6199	0.0526		163.9347

NCPWF SVR - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1098	0.0706	0.6981	2.1500e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		214.0733	214.0733	6.1500e-003		214.2271
Total	0.1098	0.0706	0.6981	2.1500e-003	0.2300	1.5900e-003	0.2316	0.0610	1.4600e-003	0.0625		214.0733	214.0733	6.1500e-003		214.2271

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF SVR - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836
Unmitigated	0.6242	2.9037	8.4658	0.0312	2.9120	0.0260	2.9380	0.7783	0.0243	0.8025		3,174.0955	3,174.0955	0.1595		3,178.0836

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	32.25	201.68	322.47	416,990	416,990
Total	32.25	201.68	322.47	416,990	416,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

NCPWF SVR - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Unmitigated	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8190					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0700e-003	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752
Total	7.7229	3.0000e-004	0.0330	0.0000		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004		0.0706	0.0706	1.9000e-004		0.0752

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	8	50	1000	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Equipment Type	lb/day										lb/day						
Emergency Generator - Diesel (750 - 9999 HP)	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313			6,716.1130	6,716.1130	0.9416		6,739.6530
Total	13.1285	58.7100	33.4750	0.0631		1.9313	1.9313		1.9313	1.9313			6,716.1130	6,716.1130	0.9416		6,739.6530

11.0 Vegetation

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San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	999.94	1000sqft	22.96	999,940.48	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

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Stationary Sources - Process Boilers EF - No stationary sources.
 Off-road Equipment - See Section 7.2.1 for Construction Details.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	499970	0
tblAreaCoating	Area_Nonresidential_Interior	1499910	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

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tblLandUse	BuildingSpaceSquareFeet	999,940.00	999,940.48
tblLandUse	LandUseSquareFeet	999,940.00	999,940.48
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Installation
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1,239.93	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,073.00
tblTripsAndVMT	HaulingVehicleClass		HHDT
tblTripsAndVMT	VendorVehicleClass		HDT_Mix
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerVehicleClass		LD_Mix
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,236,125.00	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0592	0.7489	0.3738	1.0700e-003	0.1155	0.0312	0.1467	0.0259	0.0287	0.0546	0.0000	102.0023	102.0023	0.0189	0.0000	102.4747
2019	0.4883	6.0814	3.2596	9.2800e-003	0.1713	0.2508	0.4220	0.0429	0.2310	0.2738	0.0000	876.2754	876.2754	0.1644	0.0000	880.3861
2020	0.1209	1.1454	1.2707	2.0800e-003	0.0261	0.0622	0.0884	6.9400e-003	0.0573	0.0642	0.0000	183.6961	183.6961	0.0525	0.0000	185.0092
2021	0.0374	0.3634	0.4265	6.9000e-004	5.5900e-003	0.0190	0.0246	1.4800e-003	0.0175	0.0190	0.0000	60.8980	60.8980	0.0183	0.0000	61.3547
Maximum	0.4883	6.0814	3.2596	9.2800e-003	0.1713	0.2508	0.4220	0.0429	0.2310	0.2738	0.0000	876.2754	876.2754	0.1644	0.0000	880.3861

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0200	0.4731	0.3886	1.0700e-003	0.1017	0.0145	0.1162	0.0241	0.0144	0.0385	0.0000	102.0023	102.0023	0.0189	0.0000	102.4747
2019	0.1732	3.9990	3.4198	9.2800e-003	0.1574	0.1278	0.2852	0.0410	0.1275	0.1685	0.0000	876.2749	876.2749	0.1644	0.0000	880.3857
2020	0.0557	0.9241	1.4647	2.0800e-003	0.0261	0.0512	0.0774	6.9400e-003	0.0512	0.0582	0.0000	183.6959	183.6959	0.0525	0.0000	185.0090
2021	0.0179	0.3179	0.5005	6.9000e-004	5.5900e-003	0.0171	0.0227	1.4800e-003	0.0171	0.0186	0.0000	60.8979	60.8979	0.0183	0.0000	61.3546
Maximum	0.1732	3.9990	3.4198	9.2800e-003	0.1574	0.1278	0.2852	0.0410	0.1275	0.1685	0.0000	876.2749	876.2749	0.1644	0.0000	880.3857

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	62.20	31.48	-8.31	0.00	8.68	42.03	26.44	4.73	37.14	31.07	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-3-2018	3-2-2019	2.3636	1.4769
2	3-3-2019	6-2-2019	2.3596	1.4909
3	6-3-2019	9-2-2019	2.3570	1.4883
4	9-3-2019	12-2-2019	0.1025	0.0647
7	6-3-2020	9-2-2020	0.4558	0.3513
8	9-3-2020	12-2-2020	0.5062	0.3903
9	12-3-2020	3-2-2021	0.4734	0.3860
10	3-3-2021	6-2-2021	0.0870	0.0729

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		Highest	2.3636	1.4909
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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.7000e-004	9.0000e-005	9.2500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0179	0.0179	5.0000e-005	0.0000	0.0191
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.7000e-004	9.0000e-005	9.2500e-003	0.0000	0.0000	3.0000e-005	3.0000e-005	0.0000	3.0000e-005	3.0000e-005	0.0000	0.0179	0.0179	5.0000e-005	0.0000	0.0191

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.7000e-004	5.0000e-005	5.3600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	9.6300e-003	9.6300e-003	2.0000e-005	0.0000	0.0101
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.7000e-004	5.0000e-005	5.3600e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005	0.0000	9.6300e-003	9.6300e-003	2.0000e-005	0.0000	0.0101

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.47	44.44	42.05	0.00	0.00	66.67	66.67	0.00	66.67	66.67	0.00	46.11	46.11	60.00	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Pipeline Installation	Building Construction	9/7/2019	6/12/2020	5	200	
3	Paving	Paving	6/13/2020	3/19/2021	5	200	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Pipeline Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	13,073.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	0	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0251	0.0000	0.0251	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0512	0.5247	0.3145	4.9000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	44.6726	44.6726	0.0139	0.0000	45.0203
Total	0.0512	0.5247	0.3145	4.9000e-004	0.0251	0.0303	0.0554	3.3100e-003	0.0279	0.0312	0.0000	44.6726	44.6726	0.0139	0.0000	45.0203

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3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.3600e-003	0.2228	0.0465	5.5000e-004	0.0870	8.7000e-004	0.0878	0.0217	8.3000e-004	0.0225	0.0000	54.0853	54.0853	4.8800e-003	0.0000	54.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472
Total	8.0000e-003	0.2242	0.0593	5.9000e-004	0.0904	8.9000e-004	0.0913	0.0226	8.5000e-004	0.0235	0.0000	57.3297	57.3297	4.9900e-003	0.0000	57.4545

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	1.4900e-003	0.0000	1.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.2489	0.3292	4.9000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	44.6725	44.6725	0.0139	0.0000	45.0202
Total	0.0120	0.2489	0.3292	4.9000e-004	0.0113	0.0136	0.0249	1.4900e-003	0.0136	0.0151	0.0000	44.6725	44.6725	0.0139	0.0000	45.0202

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3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.3600e-003	0.2228	0.0465	5.5000e-004	0.0870	8.7000e-004	0.0878	0.0217	8.3000e-004	0.0225	0.0000	54.0853	54.0853	4.8800e-003	0.0000	54.2073
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472
Total	8.0000e-003	0.2242	0.0593	5.9000e-004	0.0904	8.9000e-004	0.0913	0.0226	8.5000e-004	0.0235	0.0000	57.3297	57.3297	4.9900e-003	0.0000	57.4545

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0251	0.0000	0.0251	3.3100e-003	0.0000	3.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4109	4.1794	2.6477	4.1600e-003		0.2374	0.2374		0.2184	0.2184	0.0000	374.3797	374.3797	0.1185	0.0000	377.3409
Total	0.4109	4.1794	2.6477	4.1600e-003	0.0251	0.2374	0.2625	3.3100e-003	0.2184	0.2217	0.0000	374.3797	374.3797	0.1185	0.0000	377.3409

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3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0514	1.7928	0.3911	4.6100e-003	0.1089	6.7000e-003	0.1156	0.0297	6.4100e-003	0.0361	0.0000	456.0759	456.0759	0.0413	0.0000	457.1082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410
Total	0.0643	1.8032	0.4897	4.9100e-003	0.1379	6.9000e-003	0.1449	0.0374	6.6000e-003	0.0440	0.0000	482.8960	482.8960	0.0421	0.0000	483.9492

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0113	0.0000	0.0113	1.4900e-003	0.0000	1.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1021	2.1217	2.8063	4.1600e-003		0.1158	0.1158		0.1158	0.1158	0.0000	374.3792	374.3792	0.1185	0.0000	377.3405
Total	0.1021	2.1217	2.8063	4.1600e-003	0.0113	0.1158	0.1271	1.4900e-003	0.1158	0.1173	0.0000	374.3792	374.3792	0.1185	0.0000	377.3405

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3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0514	1.7928	0.3911	4.6100e-003	0.1089	6.7000e-003	0.1156	0.0297	6.4100e-003	0.0361	0.0000	456.0759	456.0759	0.0413	0.0000	457.1082
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410
Total	0.0643	1.8032	0.4897	4.9100e-003	0.1379	6.9000e-003	0.1449	0.0374	6.6000e-003	0.0440	0.0000	482.8960	482.8960	0.0421	0.0000	483.9492

3.3 Pipeline Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.5500e-003	0.0958	0.0944	1.3000e-004		6.4000e-003	6.4000e-003		5.8900e-003	5.8900e-003	0.0000	11.4389	11.4389	3.6200e-003	0.0000	11.5294
Total	9.5500e-003	0.0958	0.0944	1.3000e-004		6.4000e-003	6.4000e-003		5.8900e-003	5.8900e-003	0.0000	11.4389	11.4389	3.6200e-003	0.0000	11.5294

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3.3 Pipeline Installation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6300e-003	2.9500e-003	0.0278	8.0000e-005	8.1800e-003	6.0000e-005	8.2400e-003	2.1700e-003	5.0000e-005	2.2300e-003	0.0000	7.5608	7.5608	2.4000e-004	0.0000	7.5667
Total	3.6300e-003	2.9500e-003	0.0278	8.0000e-005	8.1800e-003	6.0000e-005	8.2400e-003	2.1700e-003	5.0000e-005	2.2300e-003	0.0000	7.5608	7.5608	2.4000e-004	0.0000	7.5667

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1100e-003	0.0711	0.0960	1.3000e-004		4.9800e-003	4.9800e-003		4.9800e-003	4.9800e-003	0.0000	11.4389	11.4389	3.6200e-003	0.0000	11.5294
Total	3.1100e-003	0.0711	0.0960	1.3000e-004		4.9800e-003	4.9800e-003		4.9800e-003	4.9800e-003	0.0000	11.4389	11.4389	3.6200e-003	0.0000	11.5294

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3.3 Pipeline Installation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6300e-003	2.9500e-003	0.0278	8.0000e-005	8.1800e-003	6.0000e-005	8.2400e-003	2.1700e-003	5.0000e-005	2.2300e-003	0.0000	7.5608	7.5608	2.4000e-004	0.0000	7.5667
Total	3.6300e-003	2.9500e-003	0.0278	8.0000e-005	8.1800e-003	6.0000e-005	8.2400e-003	2.1700e-003	5.0000e-005	2.2300e-003	0.0000	7.5608	7.5608	2.4000e-004	0.0000	7.5667

3.3 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0124	0.1242	0.1345	1.8000e-004		7.8500e-003	7.8500e-003		7.2300e-003	7.2300e-003	0.0000	16.0983	16.0983	5.2100e-003	0.0000	16.2285
Total	0.0124	0.1242	0.1345	1.8000e-004		7.8500e-003	7.8500e-003		7.2300e-003	7.2300e-003	0.0000	16.0983	16.0983	5.2100e-003	0.0000	16.2285

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3.3 Pipeline Installation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8900e-003	3.8300e-003	0.0366	1.2000e-004	0.0118	8.0000e-005	0.0119	3.1300e-003	7.0000e-005	3.2000e-003	0.0000	10.5365	10.5365	3.1000e-004	0.0000	10.5441
Total	4.8900e-003	3.8300e-003	0.0366	1.2000e-004	0.0118	8.0000e-005	0.0119	3.1300e-003	7.0000e-005	3.2000e-003	0.0000	10.5365	10.5365	3.1000e-004	0.0000	10.5441

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4800e-003	0.1023	0.1382	1.8000e-004		7.1700e-003	7.1700e-003		7.1700e-003	7.1700e-003	0.0000	16.0983	16.0983	5.2100e-003	0.0000	16.2285
Total	4.4800e-003	0.1023	0.1382	1.8000e-004		7.1700e-003	7.1700e-003		7.1700e-003	7.1700e-003	0.0000	16.0983	16.0983	5.2100e-003	0.0000	16.2285

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3.3 Pipeline Installation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8900e-003	3.8300e-003	0.0366	1.2000e-004	0.0118	8.0000e-005	0.0119	3.1300e-003	7.0000e-005	3.2000e-003	0.0000	10.5365	10.5365	3.1000e-004	0.0000	10.5441
Total	4.8900e-003	3.8300e-003	0.0366	1.2000e-004	0.0118	8.0000e-005	0.0119	3.1300e-003	7.0000e-005	3.2000e-003	0.0000	10.5365	10.5365	3.1000e-004	0.0000	10.5441

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0977	1.0127	1.0550	1.6400e-003		0.0542	0.0542		0.0499	0.0499	0.0000	144.2032	144.2032	0.0466	0.0000	145.3692
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0977	1.0127	1.0550	1.6400e-003		0.0542	0.0542		0.0499	0.0499	0.0000	144.2032	144.2032	0.0466	0.0000	145.3692

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3.4 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9700e-003	4.6700e-003	0.0447	1.4000e-004	0.0144	1.0000e-004	0.0145	3.8200e-003	9.0000e-005	3.9100e-003	0.0000	12.8581	12.8581	3.7000e-004	0.0000	12.8674
Total	5.9700e-003	4.6700e-003	0.0447	1.4000e-004	0.0144	1.0000e-004	0.0145	3.8200e-003	9.0000e-005	3.9100e-003	0.0000	12.8581	12.8581	3.7000e-004	0.0000	12.8674

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0404	0.8133	1.2453	1.6400e-003		0.0439	0.0439		0.0439	0.0439	0.0000	144.2030	144.2030	0.0466	0.0000	145.3690
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0404	0.8133	1.2453	1.6400e-003		0.0439	0.0439		0.0439	0.0439	0.0000	144.2030	144.2030	0.0466	0.0000	145.3690

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3.4 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9700e-003	4.6700e-003	0.0447	1.4000e-004	0.0144	1.0000e-004	0.0145	3.8200e-003	9.0000e-005	3.9100e-003	0.0000	12.8581	12.8581	3.7000e-004	0.0000	12.8674
Total	5.9700e-003	4.6700e-003	0.0447	1.4000e-004	0.0144	1.0000e-004	0.0145	3.8200e-003	9.0000e-005	3.9100e-003	0.0000	12.8581	12.8581	3.7000e-004	0.0000	12.8674

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0352	0.3617	0.4103	6.4000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	56.0657	56.0657	0.0181	0.0000	56.5191
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0352	0.3617	0.4103	6.4000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	56.0657	56.0657	0.0181	0.0000	56.5191

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3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	1.6500e-003	0.0162	5.0000e-005	5.5900e-003	4.0000e-005	5.6200e-003	1.4800e-003	4.0000e-005	1.5200e-003	0.0000	4.8323	4.8323	1.3000e-004	0.0000	4.8356
Total	2.1900e-003	1.6500e-003	0.0162	5.0000e-005	5.5900e-003	4.0000e-005	5.6200e-003	1.4800e-003	4.0000e-005	1.5200e-003	0.0000	4.8323	4.8323	1.3000e-004	0.0000	4.8356

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0157	0.3163	0.4843	6.4000e-004		0.0171	0.0171		0.0171	0.0171	0.0000	56.0657	56.0657	0.0181	0.0000	56.5190
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0157	0.3163	0.4843	6.4000e-004		0.0171	0.0171		0.0171	0.0171	0.0000	56.0657	56.0657	0.0181	0.0000	56.5190

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3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	1.6500e-003	0.0162	5.0000e-005	5.5900e-003	4.0000e-005	5.6200e-003	1.4800e-003	4.0000e-005	1.5200e-003	0.0000	4.8323	4.8323	1.3000e-004	0.0000	4.8356
Total	2.1900e-003	1.6500e-003	0.0162	5.0000e-005	5.5900e-003	4.0000e-005	5.6200e-003	1.4800e-003	4.0000e-005	1.5200e-003	0.0000	4.8323	4.8323	1.3000e-004	0.0000	4.8356

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.7000e-004	5.0000e-005	5.3600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	9.6300e-003	9.6300e-003	2.0000e-005	0.0000	0.0101
Unmitigated	8.7000e-004	9.0000e-005	9.2500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0179	0.0179	5.0000e-005	0.0000	0.0191

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.7000e-004	9.0000e-005	9.2500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0179	0.0179	5.0000e-005	0.0000	0.0191
Total	8.7000e-004	9.0000e-005	9.2500e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0179	0.0179	5.0000e-005	0.0000	0.0191

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-004	5.0000e-005	5.3600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	9.6300e-003	9.6300e-003	2.0000e-005	0.0000	0.0101
Total	3.7000e-004	5.0000e-005	5.3600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	9.6300e-003	9.6300e-003	2.0000e-005	0.0000	0.0101

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

NCPWF-SVR Pipeline-Open Trench
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	999.94	1000sqft	22.96	999,940.48	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

Stationary Sources - Process Boilers EF - No stationary sources.
 Off-road Equipment - See Section 7.2.1 for Construction Details.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	499970	0
tblAreaCoating	Area_Nonresidential_Interior	1499910	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

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tblLandUse	BuildingSpaceSquareFeet	999,940.00	999,940.48
tblLandUse	LandUseSquareFeet	999,940.00	999,940.48
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Installation
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1,239.93	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,073.00
tblTripsAndVMT	HaulingVehicleClass		HHDT
tblTripsAndVMT	VendorVehicleClass		HDT_Mix
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerVehicleClass		LD_Mix
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,236,125.00	0.00

2.0 Emissions Summary

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	5.6316	70.8772	35.5506	0.1028	9.0918	2.9697	12.0615	2.2423	2.7352	4.9775	0.0000	10,767.0003	10,767.0003	1.9760	0.0000	10,816.4003
2019	5.2992	66.4363	35.0046	0.1019	1.8269	2.7290	4.5559	0.4591	2.5134	2.9725	0.0000	10,616.6608	10,616.6608	1.9703	0.0000	10,665.9192
2020	1.4379	14.1243	15.3193	0.0249	0.2044	0.7542	0.9585	0.0542	0.6938	0.7480	0.0000	2,415.4322	2,415.4322	0.7201	0.0000	2,433.4339
2021	1.3324	12.9726	15.2785	0.0248	0.2044	0.6791	0.8835	0.0542	0.6248	0.6790	0.0000	2,407.9287	2,407.9287	0.7195	0.0000	2,425.9147
Maximum	5.6316	70.8772	35.5506	0.1028	9.0918	2.9697	12.0615	2.2423	2.7352	4.9775	0.0000	10,767.0003	10,767.0003	1.9760	0.0000	10,816.4003

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.6700e-003	9.5000e-004	0.1028	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004	0.0000	0.2335

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.0900e-003	5.3000e-004	0.0595	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004	0.0000	0.1241

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.70	44.21	42.07	100.00	0.00	56.76	56.76	0.00	56.76	56.76	0.00	46.11	46.11	57.63	0.00	46.84

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Pipeline Installation	Building Construction	9/7/2019	6/12/2020	5	200	
3	Paving	Paving	6/13/2020	3/19/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Pipeline Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	13,073.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	0	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2513	0.0000	0.2513	0.0331	0.0000	0.0331			0.0000			0.0000
Off-Road	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168
Total	4.8802	49.9681	29.9542	0.0466	0.2513	2.8856	3.1369	0.0331	2.6548	2.6879		4,689.8167	4,689.8167	1.4600		4,726.3168

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5983	20.7909	4.2880	0.0526	8.5085	0.0818	8.5903	2.1211	0.0782	2.1994		5,717.8331	5,717.8331	0.5040		5,730.4338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.7514	20.9091	5.5964	0.0562	8.8406	0.0841	8.9247	2.2092	0.0804	2.2896		6,077.1836	6,077.1836	0.5160		6,090.0835

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1131	0.0000	0.1131	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168
Total	1.1413	23.7057	31.3555	0.0466	0.1131	1.2942	1.4072	0.0149	1.2942	1.3091	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5983	20.7909	4.2880	0.0526	8.5085	0.0818	8.5903	2.1211	0.0782	2.1994		5,717.8331	5,717.8331	0.5040		5,730.4338
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.7514	20.9091	5.5964	0.0562	8.8406	0.0841	8.9247	2.2092	0.0804	2.2896		6,077.1836	6,077.1836	0.5160		6,090.0835

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2513	0.0000	0.2513	0.0331	0.0000	0.0331			0.0000			0.0000
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465	0.2513	2.6526	2.9039	0.0331	2.4404	2.4735		4,610.9827	4,610.9827	1.4589		4,647.4543

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5674	19.6339	4.2382	0.0519	1.2436	0.0741	1.3177	0.3379	0.0709	0.4088		5,657.1624	5,657.1624	0.5006		5,669.6782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.7087	19.7396	5.4211	0.0554	1.5757	0.0764	1.6521	0.4260	0.0730	0.4990		6,005.6781	6,005.6781	0.5115		6,018.4649

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1131	0.0000	0.1131	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465	0.1131	1.2942	1.4072	0.0149	1.2942	1.3091	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5674	19.6339	4.2382	0.0519	1.2436	0.0741	1.3177	0.3379	0.0709	0.4088		5,657.1624	5,657.1624	0.5006		5,669.6782
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.7087	19.7396	5.4211	0.0554	1.5757	0.0764	1.6521	0.4260	0.0730	0.4990		6,005.6781	6,005.6781	0.5115		6,018.4649

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Pipeline Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Pipeline Installation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379
Total	0.0870	0.0651	0.7279	2.1500e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		214.4712	214.4712	6.6700e-003		214.6379

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.3 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498
Total	0.0814	0.0588	0.6673	2.0800e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		207.6987	207.6987	6.0400e-003		207.8498

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575
Total	0.0768	0.0535	0.6252	2.0100e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		200.7178	200.7178	5.5900e-003		200.8575

4.0 Operational Detail - Mobile

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Unmitigated	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335
Total	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Total	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241

7.0 Water Detail

7.1 Mitigation Measures Water

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Summer

8.0 Waste Detail

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

NCPWF-SVR Pipeline-Open Trench
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	999.94	1000sqft	22.96	999,940.48	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

Stationary Sources - Process Boilers EF - No stationary sources.
 Off-road Equipment - See Section 7.2.1 for Construction Details.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	499970	0
tblAreaCoating	Area_Nonresidential_Interior	1499910	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	370.00	200.00
tblConstructionPhase	NumDays	20.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

tblLandUse	BuildingSpaceSquareFeet	999,940.00	999,940.48
tblLandUse	LandUseSquareFeet	999,940.00	999,940.48
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Pipeline Installation
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	1,239.93	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	13,073.00
tblTripsAndVMT	HaulingVehicleClass		HHDT
tblTripsAndVMT	VendorVehicleClass		HDT_Mix
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerVehicleClass		LD_Mix
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	231,236,125.00	0.00

2.0 Emissions Summary

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	5.6726	71.1141	35.7806	0.1017	9.0918	2.9717	12.0635	2.2423	2.7370	4.9793	0.0000	10,649.9878	10,649.9878	1.9942	0.0000	10,699.8424
2019	5.3375	66.6505	35.2202	0.1008	1.8269	2.7307	4.5577	0.4591	2.5151	2.9742	0.0000	10,499.9835	10,499.9835	1.9878	0.0000	10,549.6786
2020	1.4509	14.1315	15.2683	0.0248	0.2044	0.7542	0.9585	0.0542	0.6938	0.7480	0.0000	2,402.6278	2,402.6278	0.7197	0.0000	2,420.6201
2021	1.3448	12.9791	15.2291	0.0247	0.2044	0.6791	0.8835	0.0542	0.6248	0.6790	0.0000	2,395.5515	2,395.5515	0.7191	0.0000	2,413.5286
Maximum	5.6726	71.1141	35.7806	0.1017	9.0918	2.9717	12.0635	2.2423	2.7370	4.9793	0.0000	10,649.9878	10,649.9878	1.9942	0.0000	10,699.8424

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	9.6700e-003	9.5000e-004	0.1028	1.0000e-005	0.0000	3.7000e-004	3.7000e-004	0.0000	3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004	0.0000	0.2335

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	4.0900e-003	5.3000e-004	0.0595	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004	0.0000	0.1241

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.70	44.21	42.07	100.00	0.00	56.76	56.76	0.00	56.76	56.76	0.00	46.11	46.11	57.63	0.00	46.84

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Pipeline Installation	Building Construction	9/7/2019	6/12/2020	5	200	
3	Paving	Paving	6/13/2020	3/19/2021	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Pipeline Installation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	13,073.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Installation	0	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	16.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2513	0.0000	0.2513	0.0331	0.0000	0.0331			0.0000			0.0000
Off-Road	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168
Total	4.8802	49.9681	29.9542	0.0466	0.2513	2.8856	3.1369	0.0331	2.6548	2.6879		4,689.8167	4,689.8167	1.4600		4,726.3168

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6155	21.0132	4.6103	0.0517	8.5085	0.0837	8.5922	2.1211	0.0801	2.2012		5,622.9507	5,622.9507	0.5229		5,636.0235
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.7924	21.1460	5.8263	0.0551	8.8406	0.0860	8.9266	2.2092	0.0822	2.2914		5,960.1711	5,960.1711	0.5342		5,973.5255

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1131	0.0000	0.1131	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168
Total	1.1413	23.7057	31.3555	0.0466	0.1131	1.2942	1.4072	0.0149	1.2942	1.3091	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6155	21.0132	4.6103	0.0517	8.5085	0.0837	8.5922	2.1211	0.0801	2.2012		5,622.9507	5,622.9507	0.5229		5,636.0235
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.7924	21.1460	5.8263	0.0551	8.8406	0.0860	8.9266	2.2092	0.0822	2.2914		5,960.1711	5,960.1711	0.5342		5,973.5255

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2513	0.0000	0.2513	0.0331	0.0000	0.0331			0.0000			0.0000
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465	0.2513	2.6526	2.9039	0.0331	2.4404	2.4735		4,610.9827	4,610.9827	1.4589		4,647.4543

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5834	19.8351	4.5420	0.0510	1.2436	0.0758	1.3194	0.3379	0.0725	0.4105		5,561.9656	5,561.9656	0.5188		5,574.9346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.7470	19.9538	5.6367	0.0543	1.5757	0.0781	1.6538	0.4260	0.0746	0.5006		5,889.0008	5,889.0008	0.5289		5,902.2243

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1131	0.0000	0.1131	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465	0.1131	1.2942	1.4072	0.0149	1.2942	1.3091	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.5834	19.8351	4.5420	0.0510	1.2436	0.0758	1.3194	0.3379	0.0725	0.4105		5,561.9656	5,561.9656	0.5188		5,574.9346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.7470	19.9538	5.6367	0.0543	1.5757	0.0781	1.6538	0.4260	0.0746	0.5006		5,889.0008	5,889.0008	0.5289		5,902.2243

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Pipeline Installation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744
Total	0.2328	2.3374	2.3027	3.1100e-003		0.1560	0.1560		0.1436	0.1436		307.5419	307.5419	0.0973		309.9744

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Pipeline Installation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744
Total	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	307.5419	307.5419	0.0973		309.9744

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091
Total	0.1007	0.0731	0.6737	2.0200e-003	0.2044	1.4000e-003	0.2058	0.0542	1.2900e-003	0.0555		201.2524	201.2524	6.2700e-003		201.4091

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Pipeline Installation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004
Total	0.2095	2.1052	2.2797	3.1100e-003		0.1331	0.1331		0.1225	0.1225		300.7685	300.7685	0.0973		303.2004

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.3 Pipeline Installation - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004
Total	0.0760	1.7344	2.3421	3.1100e-003		0.1215	0.1215		0.1215	0.1215	0.0000	300.7685	300.7685	0.0973		303.2004

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360
Total	0.0944	0.0660	0.6162	1.9600e-003	0.2044	1.3800e-003	0.2058	0.0542	1.2700e-003	0.0555		194.8944	194.8944	5.6700e-003		195.0360

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

3.4 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714
Total	0.0892	0.0600	0.5759	1.8900e-003	0.2044	1.3600e-003	0.2057	0.0542	1.2500e-003	0.0555		188.3406	188.3406	5.2300e-003		188.4714

4.0 Operational Detail - Mobile

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Unmitigated	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335
Total	9.6700e-003	9.5000e-004	0.1028	1.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004		0.2188	0.2188	5.9000e-004		0.2335

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241
Total	4.0900e-003	5.3000e-004	0.0595	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.1179	0.1179	2.5000e-004		0.1241

7.0 Water Detail

7.1 Mitigation Measures Water

NCPWF-SVR Pipeline-Open Trench - San Diego County APCD Air District, Winter

8.0 Waste Detail

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF-SVR Pipeline-Trenchless
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	34.47	1000sqft	0.79	34,469.80	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

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Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	17235	0
tblAreaCoating	Area_Nonresidential_Interior	51705	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

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tblLandUse	BuildingSpaceSquareFeet	34,470.00	34,469.80
tblLandUse	LandUseSquareFeet	34,470.00	34,469.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	42.74	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	7,971,187.50	0.00

2.0 Emissions Summary

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0529	0.5260	0.3274	5.2000e-004	3.4000e-003	0.0303	0.0337	9.0000e-004	0.0279	0.0288	0.0000	47.9170	47.9170	0.0140	0.0000	48.2674
2019	0.5311	5.1519	3.3110	5.8200e-003	0.0377	0.2790	0.3167	0.0100	0.2581	0.2681	0.0000	519.7343	519.7343	0.1453	0.0000	523.3674
2020	0.1404	1.2710	0.7872	1.9600e-003	0.0124	0.0525	0.0649	3.3500e-003	0.0500	0.0534	0.0000	168.0902	168.0902	0.0367	0.0000	169.0085
Maximum	0.5311	5.1519	3.3110	5.8200e-003	0.0377	0.2790	0.3167	0.0100	0.2581	0.2681	0.0000	519.7343	519.7343	0.1453	0.0000	523.3674

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0136	0.2503	0.3421	5.2000e-004	3.4000e-003	0.0136	0.0170	9.0000e-004	0.0136	0.0145	0.0000	47.9170	47.9170	0.0140	0.0000	48.2674
2019	0.1519	2.7835	3.6269	5.8200e-003	0.0377	0.1469	0.1845	0.0100	0.1468	0.1569	0.0000	519.7337	519.7337	0.1453	0.0000	523.3668
2020	0.0524	0.9332	1.0349	1.9600e-003	0.0124	0.0443	0.0567	3.3500e-003	0.0442	0.0476	0.0000	168.0900	168.0900	0.0367	0.0000	169.0084
Maximum	0.1519	2.7835	3.6269	5.8200e-003	0.0377	0.1469	0.1845	0.0100	0.1468	0.1569	0.0000	519.7337	519.7337	0.1453	0.0000	523.3668

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	69.92	42.91	-13.07	0.00	0.00	43.42	37.83	0.00	39.09	37.49	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-3-2018	3-2-2019	1.6948	0.8080
2	3-3-2019	6-2-2019	1.6936	0.8249
3	6-3-2019	9-2-2019	1.6933	0.8245
4	9-3-2019	12-2-2019	0.8841	0.5573
5	12-3-2019	3-2-2020	0.8000	0.5439
6	3-3-2020	6-2-2020	0.7857	0.5486
7	6-3-2020	9-2-2020	0.0854	0.0596
		Highest	1.6948	0.8249

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.0000e-005	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0000e-005	0.0000	1.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	66.67	0.00	43.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.77	46.77	0.00	0.00	46.97

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Building Construction	Building Construction	9/7/2019	6/12/2020	5	200	

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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Rubber Tired Loaders	2	8.00	203	0.36
Building Construction	Welders	2	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	14.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0512	0.5247	0.3145	4.9000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	44.6726	44.6726	0.0139	0.0000	45.0203
Total	0.0512	0.5247	0.3145	4.9000e-004		0.0303	0.0303		0.0279	0.0279	0.0000	44.6726	44.6726	0.0139	0.0000	45.0203

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3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472
Total	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0120	0.2489	0.3292	4.9000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	44.6725	44.6725	0.0139	0.0000	45.0202
Total	0.0120	0.2489	0.3292	4.9000e-004		0.0136	0.0136		0.0136	0.0136	0.0000	44.6725	44.6725	0.0139	0.0000	45.0202

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3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472
Total	1.6400e-003	1.3700e-003	0.0128	4.0000e-005	3.4000e-003	2.0000e-005	3.4300e-003	9.0000e-004	2.0000e-005	9.3000e-004	0.0000	3.2445	3.2445	1.1000e-004	0.0000	3.2472

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.4109	4.1794	2.6477	4.1600e-003		0.2374	0.2374		0.2184	0.2184	0.0000	374.3797	374.3797	0.1185	0.0000	377.3409
Total	0.4109	4.1794	2.6477	4.1600e-003		0.2374	0.2374		0.2184	0.2184	0.0000	374.3797	374.3797	0.1185	0.0000	377.3409

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3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410
Total	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1021	2.1217	2.8063	4.1600e-003		0.1158	0.1158		0.1158	0.1158	0.0000	374.3792	374.3792	0.1185	0.0000	377.3405
Total	0.1021	2.1217	2.8063	4.1600e-003		0.1158	0.1158		0.1158	0.1158	0.0000	374.3792	374.3792	0.1185	0.0000	377.3405

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3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410
Total	0.0129	0.0105	0.0986	3.0000e-004	0.0290	2.0000e-004	0.0292	7.7100e-003	1.9000e-004	7.9000e-003	0.0000	26.8201	26.8201	8.3000e-004	0.0000	26.8410

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1032	0.9301	0.5325	1.2300e-003		0.0411	0.0411		0.0392	0.0392	0.0000	105.8860	105.8860	0.0253	0.0000	106.5193
Total	0.1032	0.9301	0.5325	1.2300e-003		0.0411	0.0411		0.0392	0.0392	0.0000	105.8860	105.8860	0.0253	0.0000	106.5193

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3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0800e-003	0.0294	7.9100e-003	6.0000e-005	1.4800e-003	1.9000e-004	1.6700e-003	4.3000e-004	1.9000e-004	6.1000e-004	0.0000	6.0328	6.0328	5.0000e-004	0.0000	6.0453
Worker	3.1800e-003	2.5800e-003	0.0243	7.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	6.6157	6.6157	2.1000e-004	0.0000	6.6209
Total	4.2600e-003	0.0320	0.0322	1.3000e-004	8.6400e-003	2.4000e-004	8.8800e-003	2.3300e-003	2.4000e-004	2.5600e-003	0.0000	12.6485	12.6485	7.1000e-004	0.0000	12.6661

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0326	0.6194	0.6898	1.2300e-003		0.0306	0.0306		0.0306	0.0306	0.0000	105.8858	105.8858	0.0253	0.0000	106.5192
Total	0.0326	0.6194	0.6898	1.2300e-003		0.0306	0.0306		0.0306	0.0306	0.0000	105.8858	105.8858	0.0253	0.0000	106.5192

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3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0800e-003	0.0294	7.9100e-003	6.0000e-005	1.4800e-003	1.9000e-004	1.6700e-003	4.3000e-004	1.9000e-004	6.1000e-004	0.0000	6.0328	6.0328	5.0000e-004	0.0000	6.0453
Worker	3.1800e-003	2.5800e-003	0.0243	7.0000e-005	7.1600e-003	5.0000e-005	7.2100e-003	1.9000e-003	5.0000e-005	1.9500e-003	0.0000	6.6157	6.6157	2.1000e-004	0.0000	6.6209
Total	4.2600e-003	0.0320	0.0322	1.3000e-004	8.6400e-003	2.4000e-004	8.8800e-003	2.3300e-003	2.4000e-004	2.5600e-003	0.0000	12.6485	12.6485	7.1000e-004	0.0000	12.6661

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1348	1.2291	0.7449	1.7700e-003		0.0522	0.0522		0.0498	0.0498	0.0000	150.2469	150.2469	0.0358	0.0000	151.1415
Total	0.1348	1.2291	0.7449	1.7700e-003		0.0522	0.0522		0.0498	0.0498	0.0000	150.2469	150.2469	0.0358	0.0000	151.1415

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3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0386	0.0102	9.0000e-005	2.1300e-003	1.8000e-004	2.3000e-003	6.1000e-004	1.7000e-004	7.9000e-004	0.0000	8.6238	8.6238	6.8000e-004	0.0000	8.6409
Worker	4.2800e-003	3.3500e-003	0.0320	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7400e-003	7.0000e-005	2.8000e-003	0.0000	9.2194	9.2194	2.7000e-004	0.0000	9.2261
Total	5.5500e-003	0.0419	0.0423	1.9000e-004	0.0124	2.5000e-004	0.0127	3.3500e-003	2.4000e-004	3.5900e-003	0.0000	17.8432	17.8432	9.5000e-004	0.0000	17.8670

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0469	0.8913	0.9926	1.7700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	150.2467	150.2467	0.0358	0.0000	151.1414
Total	0.0469	0.8913	0.9926	1.7700e-003		0.0440	0.0440		0.0440	0.0440	0.0000	150.2467	150.2467	0.0358	0.0000	151.1414

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3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0386	0.0102	9.0000e-005	2.1300e-003	1.8000e-004	2.3000e-003	6.1000e-004	1.7000e-004	7.9000e-004	0.0000	8.6238	8.6238	6.8000e-004	0.0000	8.6409
Worker	4.2800e-003	3.3500e-003	0.0320	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7400e-003	7.0000e-005	2.8000e-003	0.0000	9.2194	9.2194	2.7000e-004	0.0000	9.2261
Total	5.5500e-003	0.0419	0.0423	1.9000e-004	0.0124	2.5000e-004	0.0127	3.3500e-003	2.4000e-004	3.5900e-003	0.0000	17.8432	17.8432	9.5000e-004	0.0000	17.8670

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Unmitigated	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004
Total	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.2000e-004	6.2000e-004	0.0000	0.0000	6.6000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	1.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Annual

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

NCPWF-SVR Pipeline-Trenchless
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	34.47	1000sqft	0.79	34,469.80	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	17235	0
tblAreaCoating	Area_Nonresidential_Interior	51705	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

tblLandUse	BuildingSpaceSquareFeet	34,470.00	34,469.80
tblLandUse	LandUseSquareFeet	34,470.00	34,469.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	42.74	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	7,971,187.50	0.00

2.0 Emissions Summary

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	5.0333	50.0864	31.2626	0.0502	0.3321	2.8879	3.2200	0.0881	2.6569	2.7450	0.0000	5,049.167 3	5,049.167 3	1.4720	0.0000	5,085.966 5
2019	4.7318	46.8025	30.7663	0.0500	0.3321	2.6549	2.9870	0.0881	2.4425	2.5306	0.0000	4,959.498 4	4,959.498 4	1.4697	0.0000	4,996.241 0
2020	2.3771	21.5307	13.3736	0.0333	0.2156	0.8893	1.1048	0.0580	0.8479	0.9059	0.0000	3,151.866 2	3,151.866 2	0.6863	0.0000	3,169.022 5
Maximum	5.0333	50.0864	31.2626	0.0502	0.3321	2.8879	3.2200	0.0881	2.6569	2.7450	0.0000	5,049.167 3	5,049.167 3	1.4720	0.0000	5,085.966 5

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.2944	23.8240	32.6639	0.0502	0.3321	1.2965	1.6286	0.0881	1.2963	1.3843	0.0000	5,049.167 3	5,049.167 3	1.4720	0.0000	5,085.966 4
2019	1.2826	23.8115	32.5383	0.0500	0.3321	1.2964	1.6285	0.0881	1.2963	1.3843	0.0000	4,959.498 4	4,959.498 4	1.4697	0.0000	4,996.241 0
2020	0.8867	15.8050	17.5721	0.0333	0.2156	0.7500	0.9655	0.0580	0.7498	0.8078	0.0000	3,151.866 2	3,151.866 2	0.6863	0.0000	3,169.022 5
Maximum	1.2944	23.8240	32.6639	0.0502	0.3321	1.2965	1.6286	0.0881	1.2963	1.3843	0.0000	5,049.167 3	5,049.167 3	1.4720	0.0000	5,085.966 4

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	71.47	46.43	-9.78	0.00	0.00	48.03	42.25	0.00	43.80	42.14	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.3000e-004	3.0000e-005	3.5400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005	0.0000	8.0500e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.4000e-004	2.0000e-005	2.0500e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005	0.0000	4.2800e-003

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.58	33.33	42.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.02	46.02	50.00	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Building Construction	Building Construction	9/7/2019	6/12/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Rubber Tired Loaders	2	8.00	203	0.36
Building Construction	Welders	2	8.00	46	0.45

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	14.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168
Total	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496
Total	0.1531	0.1182	1.3084	3.6100e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		359.3505	359.3505	0.0120		359.6496

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866
Total	0.1413	0.1058	1.1828	3.5000e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		348.5157	348.5157	0.0108		348.7866

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5159	22.6861	12.9880	0.0300		1.0035	1.0035		0.9572	0.9572		2,846.8117	2,846.8117	0.6811		2,863.8399
Total	2.5159	22.6861	12.9880	0.0300		1.0035	1.0035		0.9572	0.9572		2,846.8117	2,846.8117	0.6811		2,863.8399

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0259	0.7095	0.1826	1.5300e-003	0.0367	4.7100e-003	0.0415	0.0106	4.5100e-003	0.0151		164.0891	164.0891	0.0131		164.4157
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.1020	0.7665	0.8195	3.4100e-003	0.2156	5.9400e-003	0.2215	0.0580	5.6400e-003	0.0636		351.7514	351.7514	0.0189		352.2239

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,846.8117	2,846.8117	0.6811		2,863.8399
Total	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,846.8117	2,846.8117	0.6811		2,863.8399

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0259	0.7095	0.1826	1.5300e-003	0.0367	4.7100e-003	0.0415	0.0106	4.5100e-003	0.0151		164.0891	164.0891	0.0131		164.4157
Worker	0.0761	0.0570	0.6369	1.8800e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		187.6623	187.6623	5.8400e-003		187.8082
Total	0.1020	0.7665	0.8195	3.4100e-003	0.2156	5.9400e-003	0.2215	0.0580	5.6400e-003	0.0636		351.7514	351.7514	0.0189		352.2239

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2848	20.8319	12.6258	0.0300		0.8851	0.8851		0.8439	0.8439		2,807.0995	2,807.0995	0.6686		2,823.8141
Total	2.2848	20.8319	12.6258	0.0300		0.8851	0.8851		0.8439	0.8439		2,807.0995	2,807.0995	0.6686		2,823.8141

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0211	0.6474	0.1640	1.5200e-003	0.0367	3.0100e-003	0.0398	0.0106	2.8800e-003	0.0135		163.0303	163.0303	0.0124		163.3399
Worker	0.0712	0.0514	0.5838	1.8200e-003	0.1788	1.2100e-003	0.1800	0.0474	1.1100e-003	0.0485		181.7364	181.7364	5.2900e-003		181.8686
Total	0.0923	0.6988	0.7478	3.3400e-003	0.2156	4.2200e-003	0.2198	0.0580	3.9900e-003	0.0620		344.7667	344.7667	0.0177		345.2084

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,807.0995	2,807.0995	0.6686		2,823.8141
Total	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,807.0995	2,807.0995	0.6686		2,823.8141

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0211	0.6474	0.1640	1.5200e-003	0.0367	3.0100e-003	0.0398	0.0106	2.8800e-003	0.0135		163.0303	163.0303	0.0124		163.3399
Worker	0.0712	0.0514	0.5838	1.8200e-003	0.1788	1.2100e-003	0.1800	0.0474	1.1100e-003	0.0485		181.7364	181.7364	5.2900e-003		181.8686
Total	0.0923	0.6988	0.7478	3.3400e-003	0.2156	4.2200e-003	0.2198	0.0580	3.9900e-003	0.0620		344.7667	344.7667	0.0177		345.2084

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

No Hearths Installed

Use Low VOC Cleaning Supplies

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Unmitigated	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003
Total	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Total	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Summer

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

NCPWF-SVR Pipeline-Trenchless
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	34.47	1000sqft	0.79	34,469.80	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

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Architectural Coating - No architectural coatings.

Vehicle Trips - No mobile sources during operation.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No coatings used in this project phase.

Landscape Equipment - There is no landscaping for this project.

Energy Use - No energy use for this project.

Water And Wastewater - No water use for this project.

Solid Waste - No solid waste for this project.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings for this project. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	17235	0
tblAreaCoating	Area_Nonresidential_Interior	51705	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	200.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

tblLandUse	BuildingSpaceSquareFeet	34,470.00	34,469.80
tblLandUse	LandUseSquareFeet	34,470.00	34,469.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Trenching
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	42.74	0.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	7,971,187.50	0.00

2.0 Emissions Summary

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	5.0571	50.1008	31.1702	0.0500	0.3321	2.8879	3.2200	0.0881	2.6569	2.7450	0.0000	5,027.0371	5,027.0371	1.4713	0.0000	5,063.8189
2019	4.7541	46.8154	30.6783	0.0498	0.3321	2.6549	2.9870	0.0881	2.4425	2.5306	0.0000	4,938.0178	4,938.0178	1.4691	0.0000	4,974.7440
2020	2.3895	21.5354	13.3479	0.0331	0.2156	0.8893	1.1049	0.0580	0.8479	0.9059	0.0000	3,136.1157	3,136.1157	0.6867	0.0000	3,153.2841
Maximum	5.0571	50.1008	31.1702	0.0500	0.3321	2.8879	3.2200	0.0881	2.6569	2.7450	0.0000	5,027.0371	5,027.0371	1.4713	0.0000	5,063.8189

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	1.3182	23.8385	32.5715	0.0500	0.3321	1.2965	1.6286	0.0881	1.2963	1.3843	0.0000	5,027.0371	5,027.0371	1.4713	0.0000	5,063.8188
2019	1.3048	23.8245	32.4503	0.0498	0.3321	1.2964	1.6285	0.0881	1.2963	1.3843	0.0000	4,938.0178	4,938.0178	1.4691	0.0000	4,974.7440
2020	0.8991	15.8097	17.5464	0.0331	0.2156	0.7500	0.9656	0.0580	0.7498	0.8078	0.0000	3,136.1157	3,136.1157	0.6867	0.0000	3,153.2841
Maximum	1.3182	23.8385	32.5715	0.0500	0.3321	1.2965	1.6286	0.0881	1.2963	1.3843	0.0000	5,027.0371	5,027.0371	1.4713	0.0000	5,063.8188

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	71.13	46.41	-9.80	0.00	0.00	48.03	42.25	0.00	43.80	42.14	0.00	0.00	0.00	0.00	0.00	0.00

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	3.3000e-004	3.0000e-005	3.5400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005	0.0000	8.0500e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1.4000e-004	2.0000e-005	2.0500e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005	0.0000	4.2800e-003

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	57.58	33.33	42.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.02	46.02	50.00	0.00	46.83

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	12/3/2018	9/6/2019	5	200	
2	Building Construction	Building Construction	9/7/2019	6/12/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	2	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Trenching	Trenchers	2	8.00	78	0.50
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Rubber Tired Loaders	2	8.00	203	0.36
Building Construction	Welders	2	8.00	46	0.45

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	10	26.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	14.00	6.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Trenching - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168
Total	4.8802	49.9681	29.9542	0.0466		2.8856	2.8856		2.6548	2.6548		4,689.8167	4,689.8167	1.4600		4,726.3168

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168
Total	1.1413	23.7057	31.3555	0.0466		1.2942	1.2942		1.2942	1.2942	0.0000	4,689.8167	4,689.8167	1.4600		4,726.3168

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Trenching - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020
Total	0.1769	0.1327	1.2160	3.3900e-003	0.3321	2.3000e-003	0.3344	0.0881	2.1200e-003	0.0902		337.2204	337.2204	0.0113		337.5020

3.2 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543
Total	4.5905	46.6967	29.5835	0.0465		2.6526	2.6526		2.4404	2.4404		4,610.9827	4,610.9827	1.4589		4,647.4543

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543
Total	1.1413	23.7057	31.3555	0.0465		1.2942	1.2942		1.2942	1.2942	0.0000	4,610.9827	4,610.9827	1.4589		4,647.4543

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.2 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897
Total	0.1636	0.1187	1.0948	3.2800e-003	0.3321	2.2800e-003	0.3344	0.0881	2.1000e-003	0.0902		327.0352	327.0352	0.0102		327.2897

3.3 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5159	22.6861	12.9880	0.0300		1.0035	1.0035		0.9572	0.9572		2,846.8117	2,846.8117	0.6811		2,863.8399
Total	2.5159	22.6861	12.9880	0.0300		1.0035	1.0035		0.9572	0.9572		2,846.8117	2,846.8117	0.6811		2,863.8399

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	0.7089	0.2035	1.4900e-003	0.0367	4.8000e-003	0.0415	0.0106	4.5900e-003	0.0152		159.5793	159.5793	0.0139		159.9278
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.1151	0.7728	0.7930	3.2600e-003	0.2156	6.0300e-003	0.2216	0.0580	5.7200e-003	0.0637		335.6751	335.6751	0.0194		336.1607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,846.8117	2,846.8117	0.6811		2,863.8399
Total	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,846.8117	2,846.8117	0.6811		2,863.8399

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	0.7089	0.2035	1.4900e-003	0.0367	4.8000e-003	0.0415	0.0106	4.5900e-003	0.0152		159.5793	159.5793	0.0139		159.9278
Worker	0.0881	0.0639	0.5895	1.7700e-003	0.1788	1.2300e-003	0.1801	0.0474	1.1300e-003	0.0486		176.0959	176.0959	5.4800e-003		176.2329
Total	0.1151	0.7728	0.7930	3.2600e-003	0.2156	6.0300e-003	0.2216	0.0580	5.7200e-003	0.0637		335.6751	335.6751	0.0194		336.1607

3.3 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2848	20.8319	12.6258	0.0300		0.8851	0.8851		0.8439	0.8439		2,807.0995	2,807.0995	0.6686		2,823.8141
Total	2.2848	20.8319	12.6258	0.0300		0.8851	0.8851		0.8439	0.8439		2,807.0995	2,807.0995	0.6686		2,823.8141

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0221	0.6458	0.1830	1.4800e-003	0.0367	3.0800e-003	0.0398	0.0106	2.9400e-003	0.0135		158.4836	158.4836	0.0132		158.8136
Worker	0.0826	0.0577	0.5392	1.7100e-003	0.1788	1.2100e-003	0.1800	0.0474	1.1100e-003	0.0485		170.5326	170.5326	4.9600e-003		170.6565
Total	0.1047	0.7035	0.7221	3.1900e-003	0.2156	4.2900e-003	0.2198	0.0580	4.0500e-003	0.0621		329.0162	329.0162	0.0182		329.4701

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,807.0995	2,807.0995	0.6686		2,823.8141
Total	0.7944	15.1062	16.8243	0.0300		0.7458	0.7458		0.7458	0.7458	0.0000	2,807.0995	2,807.0995	0.6686		2,823.8141

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

3.3 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0221	0.6458	0.1830	1.4800e-003	0.0367	3.0800e-003	0.0398	0.0106	2.9400e-003	0.0135		158.4836	158.4836	0.0132		158.8136
Worker	0.0826	0.0577	0.5392	1.7100e-003	0.1788	1.2100e-003	0.1800	0.0474	1.1100e-003	0.0485		170.5326	170.5326	4.9600e-003		170.6565
Total	0.1047	0.7035	0.7221	3.1900e-003	0.2156	4.2900e-003	0.2198	0.0580	4.0500e-003	0.0621		329.0162	329.0162	0.0182		329.4701

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- No Hearths Installed
- Use Low VOC Cleaning Supplies

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Unmitigated	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003
Total	3.3000e-004	3.0000e-005	3.5400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		7.5400e-003	7.5400e-003	2.0000e-005		8.0500e-003

NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003
Total	1.4000e-004	2.0000e-005	2.0500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.2800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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NCPWF-SVR Pipeline-Trenchless - San Diego County APCD Air District, Winter

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

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tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

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tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.1250	1.2664	0.7532	1.3300e-003	4.2300e-003	0.0640	0.0682	1.1300e-003	0.0596	0.0607	0.0000	119.9844	119.9844	0.0321	0.0000	120.7863
2019	0.4234	4.2925	2.8428	5.8400e-003	0.5106	0.2038	0.7144	0.2642	0.1899	0.4541	0.0000	523.5068	523.5068	0.1204	0.0000	526.5171
2020	0.3724	3.2921	2.8030	6.4000e-003	0.1419	0.1541	0.2960	0.0385	0.1472	0.1857	0.0000	568.2134	568.2134	0.0763	0.0000	570.1206
2021	1.3322	1.9430	1.8239	3.8600e-003	0.0675	0.0898	0.1572	0.0182	0.0849	0.1031	0.0000	340.8575	340.8575	0.0615	0.0000	342.3938
Maximum	1.3322	4.2925	2.8428	6.4000e-003	0.5106	0.2038	0.7144	0.2642	0.1899	0.4541	0.0000	568.2134	568.2134	0.1204	0.0000	570.1206

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0486	0.7467	0.8288	1.3300e-003	4.2300e-003	0.0361	0.0403	1.1300e-003	0.0352	0.0364	0.0000	119.9843	119.9843	0.0321	0.0000	120.7862
2019	0.2441	3.2311	2.9549	5.8400e-003	0.2621	0.1500	0.4121	0.1277	0.1439	0.2716	0.0000	523.5063	523.5063	0.1204	0.0000	526.5166
2020	0.2506	2.8336	2.8922	6.4000e-003	0.1419	0.1389	0.2808	0.0385	0.1346	0.1731	0.0000	568.2130	568.2130	0.0763	0.0000	570.1203
2021	1.2504	1.6290	1.9528	3.8600e-003	0.0675	0.0802	0.1476	0.0182	0.0780	0.0962	0.0000	340.8572	340.8572	0.0615	0.0000	342.3935
Maximum	1.2504	3.2311	2.9549	6.4000e-003	0.2621	0.1500	0.4121	0.1277	0.1439	0.2716	0.0000	568.2130	568.2130	0.1204	0.0000	570.1203

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	20.39	21.81	-4.93	0.00	34.31	20.82	28.73	42.40	18.63	28.16	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2018	12-31-2018	1.3857	0.7921
2	1-1-2019	3-31-2019	1.2477	0.8166
3	4-1-2019	6-30-2019	1.2268	0.9125
4	7-1-2019	9-30-2019	1.2249	0.9159
5	10-1-2019	12-31-2019	1.0080	0.8239
6	1-1-2020	3-31-2020	0.9093	0.7653
7	4-1-2020	6-30-2020	0.9065	0.7626
8	7-1-2020	9-30-2020	0.9165	0.7710

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9	10-1-2020	12-31-2020	0.9192	0.7737
10	1-1-2021	3-31-2021	0.8173	0.7103
11	4-1-2021	6-30-2021	0.3985	0.3461
12	7-1-2021	9-30-2021	1.1520	1.0196
		Highest	1.3857	1.0196

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Waste						0.0000	0.0000		0.0000	0.0000	1.7924	0.0000	1.7924	0.1059	0.0000	4.4406
Water						0.0000	0.0000		0.0000	0.0000	0.0990	1.3277	1.4267	0.0102	2.5000e-004	1.7570
Total	1.0663	0.0632	0.1807	6.2000e-004	0.0524	6.2000e-004	0.0530	0.0140	5.9000e-004	0.0146	1.8914	58.2219	60.1133	0.1191	2.5000e-004	63.1658

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Waste						0.0000	0.0000		0.0000	0.0000	1.7924	0.0000	1.7924	0.1059	0.0000	4.4406
Water						0.0000	0.0000		0.0000	0.0000	0.0990	1.3277	1.4267	0.0102	2.5000e-004	1.7570
Total	1.0663	0.0632	0.1807	6.2000e-004	0.0524	6.2000e-004	0.0530	0.0140	5.9000e-004	0.0146	1.8914	58.2219	60.1133	0.1191	2.5000e-004	63.1658

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1227	1.2646	0.7360	1.2800e-003		0.0640	0.0640		0.0596	0.0596	0.0000	115.9095	115.9095	0.0319	0.0000	116.7078
Total	0.1227	1.2646	0.7360	1.2800e-003		0.0640	0.0640		0.0596	0.0596	0.0000	115.9095	115.9095	0.0319	0.0000	116.7078

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3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785
Total	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0463	0.7449	0.8117	1.2800e-003		0.0360	0.0360		0.0352	0.0352	0.0000	115.9093	115.9093	0.0319	0.0000	116.7077
Total	0.0463	0.7449	0.8117	1.2800e-003		0.0360	0.0360		0.0352	0.0352	0.0000	115.9093	115.9093	0.0319	0.0000	116.7077

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3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785
Total	2.2600e-003	1.7900e-003	0.0171	5.0000e-005	4.2300e-003	3.0000e-005	4.2700e-003	1.1300e-003	3.0000e-005	1.1500e-003	0.0000	4.0750	4.0750	1.4000e-004	0.0000	4.0785

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0720	0.7336	0.4522	8.0000e-004		0.0368	0.0368		0.0342	0.0342	0.0000	70.9840	70.9840	0.0198	0.0000	71.4777
Total	0.0720	0.7336	0.4522	8.0000e-004		0.0368	0.0368		0.0342	0.0342	0.0000	70.9840	70.9840	0.0198	0.0000	71.4777

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3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570
Total	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.4577	0.5033	8.0000e-004		0.0222	0.0222		0.0217	0.0217	0.0000	70.9839	70.9839	0.0198	0.0000	71.4776
Total	0.0284	0.4577	0.5033	8.0000e-004		0.0222	0.0222		0.0217	0.0217	0.0000	70.9839	70.9839	0.0198	0.0000	71.4776

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3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570
Total	1.2900e-003	9.9000e-004	9.6000e-003	3.0000e-005	2.6300e-003	2.0000e-005	2.6500e-003	7.0000e-004	2.0000e-005	7.2000e-004	0.0000	2.4551	2.4551	8.0000e-005	0.0000	2.4570

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4518	0.0000	0.4518	0.2483	0.0000	0.2483	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2303	2.4368	1.5384	2.8000e-003		0.1188	0.1188		0.1096	0.1096	0.0000	247.9256	247.9256	0.0757	0.0000	249.8184
Total	0.2303	2.4368	1.5384	2.8000e-003	0.4518	0.1188	0.5705	0.2483	0.1096	0.3579	0.0000	247.9256	247.9256	0.0757	0.0000	249.8184

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1546	0.0337	4.0000e-004	8.6300e-003	5.8000e-004	9.2100e-003	2.3700e-003	5.5000e-004	2.9200e-003	0.0000	39.3305	39.3305	3.5600e-003	0.0000	39.4196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7300e-003	3.6300e-003	0.0351	1.0000e-004	9.6200e-003	7.0000e-005	9.6900e-003	2.5600e-003	6.0000e-005	2.6200e-003	0.0000	8.9820	8.9820	2.9000e-004	0.0000	8.9892
Total	9.1600e-003	0.1582	0.0688	5.0000e-004	0.0183	6.5000e-004	0.0189	4.9300e-003	6.1000e-004	5.5400e-003	0.0000	48.3125	48.3125	3.8500e-003	0.0000	48.4088

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2033	0.0000	0.2033	0.1117	0.0000	0.1117	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1323	1.8096	1.5840	2.8000e-003		0.0866	0.0866		0.0823	0.0823	0.0000	247.9253	247.9253	0.0757	0.0000	249.8181
Total	0.1323	1.8096	1.5840	2.8000e-003	0.2033	0.0866	0.2899	0.1117	0.0823	0.1940	0.0000	247.9253	247.9253	0.0757	0.0000	249.8181

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4300e-003	0.1546	0.0337	4.0000e-004	8.6300e-003	5.8000e-004	9.2100e-003	2.3700e-003	5.5000e-004	2.9200e-003	0.0000	39.3305	39.3305	3.5600e-003	0.0000	39.4196
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7300e-003	3.6300e-003	0.0351	1.0000e-004	9.6200e-003	7.0000e-005	9.6900e-003	2.5600e-003	6.0000e-005	2.6200e-003	0.0000	8.9820	8.9820	2.9000e-004	0.0000	8.9892
Total	9.1600e-003	0.1582	0.0688	5.0000e-004	0.0183	6.5000e-004	0.0189	4.9300e-003	6.1000e-004	5.5400e-003	0.0000	48.3125	48.3125	3.8500e-003	0.0000	48.4088

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0900	0.7765	0.6221	1.0400e-003		0.0461	0.0461		0.0441	0.0441	0.0000	89.9134	89.9134	0.0172	0.0000	90.3430
Total	0.0900	0.7765	0.6221	1.0400e-003		0.0461	0.0461		0.0441	0.0441	0.0000	89.9134	89.9134	0.0172	0.0000	90.3430

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5600e-003	0.1757	0.0472	3.8000e-004	9.2900e-003	1.2200e-003	0.0105	2.6800e-003	1.1600e-003	3.8500e-003	0.0000	37.1949	37.1949	2.9900e-003	0.0000	37.2695
Worker	0.0141	0.0108	0.1045	3.0000e-004	0.0286	2.1000e-004	0.0288	7.6100e-003	1.9000e-004	7.8000e-003	0.0000	26.7213	26.7213	8.6000e-004	0.0000	26.7428
Total	0.0206	0.1865	0.1517	6.8000e-004	0.0379	1.4300e-003	0.0394	0.0103	1.3500e-003	0.0117	0.0000	63.9162	63.9162	3.8500e-003	0.0000	64.0124

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0523	0.6180	0.6375	1.0400e-003		0.0392	0.0392		0.0380	0.0380	0.0000	89.9133	89.9133	0.0172	0.0000	90.3429
Total	0.0523	0.6180	0.6375	1.0400e-003		0.0392	0.0392		0.0380	0.0380	0.0000	89.9133	89.9133	0.0172	0.0000	90.3429

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5600e-003	0.1757	0.0472	3.8000e-004	9.2900e-003	1.2200e-003	0.0105	2.6800e-003	1.1600e-003	3.8500e-003	0.0000	37.1949	37.1949	2.9900e-003	0.0000	37.2695
Worker	0.0141	0.0108	0.1045	3.0000e-004	0.0286	2.1000e-004	0.0288	7.6100e-003	1.9000e-004	7.8000e-003	0.0000	26.7213	26.7213	8.6000e-004	0.0000	26.7428
Total	0.0206	0.1865	0.1517	6.8000e-004	0.0379	1.4300e-003	0.0394	0.0103	1.3500e-003	0.0117	0.0000	63.9162	63.9162	3.8500e-003	0.0000	64.0124

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3032	2.6583	2.2868	3.9100e-003		0.1504	0.1504		0.1437	0.1437	0.0000	333.0921	333.0921	0.0628	0.0000	334.6617
Total	0.3032	2.6583	2.2868	3.9100e-003		0.1504	0.1504		0.1437	0.1437	0.0000	333.0921	333.0921	0.0628	0.0000	334.6617

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5973	0.1587	1.4200e-003	0.0348	2.9100e-003	0.0377	0.0100	2.7900e-003	0.0128	0.0000	138.2634	138.2634	0.0106	0.0000	138.5283
Worker	0.0493	0.0365	0.3576	1.0700e-003	0.1072	7.7000e-004	0.1079	0.0285	7.1000e-004	0.0292	0.0000	96.8579	96.8579	2.9100e-003	0.0000	96.9306
Total	0.0692	0.6338	0.5162	2.4900e-003	0.1419	3.6800e-003	0.1456	0.0385	3.5000e-003	0.0420	0.0000	235.1213	235.1213	0.0135	0.0000	235.4589

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1814	2.1999	2.3760	3.9100e-003		0.1352	0.1352		0.1311	0.1311	0.0000	333.0917	333.0917	0.0628	0.0000	334.6613
Total	0.1814	2.1999	2.3760	3.9100e-003		0.1352	0.1352		0.1311	0.1311	0.0000	333.0917	333.0917	0.0628	0.0000	334.6613

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0200	0.5973	0.1587	1.4200e-003	0.0348	2.9100e-003	0.0377	0.0100	2.7900e-003	0.0128	0.0000	138.2634	138.2634	0.0106	0.0000	138.5283
Worker	0.0493	0.0365	0.3576	1.0700e-003	0.1072	7.7000e-004	0.1079	0.0285	7.1000e-004	0.0292	0.0000	96.8579	96.8579	2.9100e-003	0.0000	96.9306
Total	0.0692	0.6338	0.5162	2.4900e-003	0.1419	3.6800e-003	0.1456	0.0385	3.5000e-003	0.0420	0.0000	235.1213	235.1213	0.0135	0.0000	235.4589

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1000	0.8878	0.8245	1.4300e-003		0.0476	0.0476		0.0455	0.0455	0.0000	122.0526	122.0526	0.0226	0.0000	122.6166
Total	0.1000	0.8878	0.8245	1.4300e-003		0.0476	0.0476		0.0455	0.0455	0.0000	122.0526	122.0526	0.0226	0.0000	122.6166

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9400e-003	0.1973	0.0526	5.1000e-004	0.0127	4.2000e-004	0.0132	3.6800e-003	4.0000e-004	4.0800e-003	0.0000	50.1965	50.1965	3.7300e-003	0.0000	50.2896
Worker	0.0170	0.0121	0.1223	3.8000e-004	0.0393	2.8000e-004	0.0395	0.0104	2.6000e-004	0.0107	0.0000	34.2976	34.2976	9.8000e-004	0.0000	34.3222
Total	0.0230	0.2095	0.1749	8.9000e-004	0.0520	7.0000e-004	0.0527	0.0141	6.6000e-004	0.0148	0.0000	84.4941	84.4941	4.7100e-003	0.0000	84.6118

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0616	0.7665	0.8671	1.4300e-003		0.0455	0.0455		0.0443	0.0443	0.0000	122.0524	122.0524	0.0226	0.0000	122.6165
Total	0.0616	0.7665	0.8671	1.4300e-003		0.0455	0.0455		0.0443	0.0443	0.0000	122.0524	122.0524	0.0226	0.0000	122.6165

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3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9400e-003	0.1973	0.0526	5.1000e-004	0.0127	4.2000e-004	0.0132	3.6800e-003	4.0000e-004	4.0800e-003	0.0000	50.1965	50.1965	3.7300e-003	0.0000	50.2896
Worker	0.0170	0.0121	0.1223	3.8000e-004	0.0393	2.8000e-004	0.0395	0.0104	2.6000e-004	0.0107	0.0000	34.2976	34.2976	9.8000e-004	0.0000	34.3222
Total	0.0230	0.2095	0.1749	8.9000e-004	0.0520	7.0000e-004	0.0527	0.0141	6.6000e-004	0.0148	0.0000	84.4941	84.4941	4.7100e-003	0.0000	84.6118

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0376	0.3667	0.2350	5.2000e-004		0.0172	0.0172		0.0163	0.0163	0.0000	45.1536	45.1536	9.9600e-003	0.0000	45.4027
Total	1.1548	0.3667	0.2350	5.2000e-004		0.0172	0.0172		0.0163	0.0163	0.0000	45.1536	45.1536	9.9600e-003	0.0000	45.4027

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3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010
Total	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.2425	0.2940	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	45.1535	45.1535	9.9600e-003	0.0000	45.4026
Total	1.1290	0.2425	0.2940	5.2000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	45.1535	45.1535	9.9600e-003	0.0000	45.4026

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3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010
Total	3.7200e-003	2.6500e-003	0.0267	8.0000e-005	8.5800e-003	6.0000e-005	8.6400e-003	2.2800e-003	6.0000e-005	2.3400e-003	0.0000	7.4956	7.4956	2.1000e-004	0.0000	7.5010

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0478	0.4743	0.5414	8.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	75.6652	75.6652	0.0238	0.0000	76.2610
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0478	0.4743	0.5414	8.7000e-004		0.0242	0.0242		0.0223	0.0223	0.0000	75.6652	75.6652	0.0238	0.0000	76.2610

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3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008
Total	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0302	0.4057	0.5687	8.7000e-004		0.0215	0.0215		0.0207	0.0207	0.0000	75.6651	75.6651	0.0238	0.0000	76.2609
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0302	0.4057	0.5687	8.7000e-004		0.0215	0.0215		0.0207	0.0207	0.0000	75.6651	75.6651	0.0238	0.0000	76.2609

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3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008
Total	2.9800e-003	2.1200e-003	0.0214	7.0000e-005	6.8600e-003	5.0000e-005	6.9100e-003	1.8200e-003	4.0000e-005	1.8700e-003	0.0000	5.9965	5.9965	1.7000e-004	0.0000	6.0008

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636
Unmitigated	0.0131	0.0632	0.1785	6.2000e-004	0.0524	6.1000e-004	0.0530	0.0140	5.8000e-004	0.0146	0.0000	56.8899	56.8899	2.9500e-003	0.0000	56.9636

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Unmitigated	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Total	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003
Total	1.0533	2.0000e-005	2.2300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.6000e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.4267	0.0102	2.5000e-004	1.7570
Unmitigated	1.4267	0.0102	2.5000e-004	1.7570

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.312 / 0	1.4267	0.0102	2.5000e-004	1.7570
Total		1.4267	0.0102	2.5000e-004	1.7570

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.312 / 0	1.4267	0.0102	2.5000e-004	1.7570
Total		1.4267	0.0102	2.5000e-004	1.7570

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.7924	0.1059	0.0000	4.4406
Unmitigated	1.7924	0.1059	0.0000	4.4406

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	8.83	1.7924	0.1059	0.0000	4.4406
Total		1.7924	0.1059	0.0000	4.4406

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	8.83	1.7924	0.1059	0.0000	4.4406
Total		1.7924	0.1059	0.0000	4.4406

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCWRP Expansion - San Diego County APCD Air District, Summer

NCWRP Expansion
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

NCWRP Expansion - San Diego County APCD Air District, Summer

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

NCWRP Expansion - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

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tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

NCWRP Expansion - San Diego County APCD Air District, Summer

tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

NCWRP Expansion - San Diego County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7871	38.3716	22.8518	0.0403	0.1314	1.9395	2.0709	0.0349	1.8057	1.8406	0.0000	4,015.3224	4,015.3224	1.0716	0.0000	4,042.1131
2019	3.5762	35.8268	22.5551	0.0498	6.2726	1.7958	7.8645	3.3775	1.6705	4.8468	0.0000	4,903.4578	4,903.4578	1.1687	0.0000	4,919.9801
2020	2.8380	25.0550	21.4967	0.0494	1.1087	1.1760	2.2847	0.3002	1.1231	1.4233	0.0000	4,838.5958	4,838.5958	0.6408	0.0000	4,854.6145
2021	22.6020	22.7987	20.9204	0.0490	1.1087	1.0061	2.1148	0.3002	0.9606	1.2608	0.0000	4,799.0525	4,799.0525	0.7047	0.0000	4,814.6799
Maximum	22.6020	38.3716	22.8518	0.0498	6.2726	1.9395	7.8645	3.3775	1.8057	4.8468	0.0000	4,903.4578	4,903.4578	1.1687	0.0000	4,919.9801

NCWRP Expansion - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Total	5.9655	0.8580	2.6526	9.1200e-003	0.7572	8.7600e-003	0.7659	0.2024	8.2300e-003	0.2106		925.0746	925.0746	0.0466	0.0000	926.2394

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Total	5.9655	0.8580	2.6526	9.1200e-003	0.7572	8.7600e-003	0.7659	0.2024	8.2300e-003	0.2106		925.0746	925.0746	0.0466	0.0000	926.2394

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCWRP Expansion - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

NCWRP Expansion - San Diego County APCD Air District, Summer

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787
Total	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787
Total	0.0681	0.0491	0.5477	1.4400e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		143.5559	143.5559	4.9100e-003		143.6787

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Summer

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0236	0.0000	6.0236	3.3105	0.0000	3.3105			0.0000			0.0000
Off-Road	3.0711	32.4903	20.5118	0.0373		1.5833	1.5833		1.4611	1.4611		3,643.8830	3,643.8830	1.1128		3,671.7017
Total	3.0711	32.4903	20.5118	0.0373	6.0236	1.5833	7.6070	3.3105	1.4611	4.7716		3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0584	2.0205	0.4362	5.3400e-003	0.1175	7.6200e-003	0.1252	0.0322	7.2900e-003	0.0395		582.1746	582.1746	0.0515		583.4626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1212	2.0644	0.9312	6.7400e-003	0.2490	8.5600e-003	0.2575	0.0671	8.1500e-003	0.0752		721.4066	721.4066	0.0560		722.8057

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7106	0.0000	2.7106	1.4897	0.0000	1.4897			0.0000			0.0000
Off-Road	1.7634	24.1281	21.1198	0.0373		1.1540	1.1540		1.0972	1.0972	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017
Total	1.7634	24.1281	21.1198	0.0373	2.7106	1.1540	3.8646	1.4897	1.0972	2.5869	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Summer

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0584	2.0205	0.4362	5.3400e-003	0.1175	7.6200e-003	0.1252	0.0322	7.2900e-003	0.0395		582.1746	582.1746	0.0515		583.4626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0438	0.4951	1.4000e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		139.2319	139.2319	4.4500e-003		139.3431
Total	0.1212	2.0644	0.9312	6.7400e-003	0.2490	8.5600e-003	0.2575	0.0671	8.1500e-003	0.0752		721.4066	721.4066	0.0560		722.8057

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160
Total	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1841	4.9595	1.2804	0.0110	0.2708	0.0345	0.3053	0.0780	0.0330	0.1110		1,184.0665	1,184.0665	0.0914		1,186.3520
Worker	0.4005	0.2795	3.1560	8.9100e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		887.6036	887.6036	0.0283		888.3122
Total	0.5846	5.2390	4.4364	0.0200	1.1087	0.0405	1.1492	0.3002	0.0385	0.3387		2,071.6702	2,071.6702	0.1198		2,074.6642

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160
Total	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.1841	4.9595	1.2804	0.0110	0.2708	0.0345	0.3053	0.0780	0.0330	0.1110		1,184.0665	1,184.0665	0.0914			1,186.3520
Worker	0.4005	0.2795	3.1560	8.9100e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		887.6036	887.6036	0.0283			888.3122
Total	0.5846	5.2390	4.4364	0.0200	1.1087	0.0405	1.1492	0.3002	0.0385	0.3387		2,071.6702	2,071.6702	0.1198			2,074.6642

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283			2,816.0414
Total	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283			2,816.0414

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1495	4.5103	1.1491	0.0110	0.2708	0.0221	0.2929	0.0780	0.0211	0.0991		1,176.160 3	1,176.160 3	0.0868		1,178.329 5
Worker	0.3743	0.2522	2.8913	8.6300e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		859.6020	859.6020	0.0257		860.2437
Total	0.5238	4.7625	4.0403	0.0196	1.1087	0.0280	1.1366	0.3002	0.0265	0.3267		2,035.762 3	2,035.762 3	0.1124		2,038.573 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.833 4	2,802.833 4	0.5283		2,816.041 4
Total	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.833 4	2,802.833 4	0.5283		2,816.041 4

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1495	4.5103	1.1491	0.0110	0.2708	0.0221	0.2929	0.0780	0.0211	0.0991		1,176.1603	1,176.1603	0.0868		1,178.3295
Worker	0.3743	0.2522	2.8913	8.6300e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		859.6020	859.6020	0.0257		860.2437
Total	0.5238	4.7625	4.0403	0.0196	1.1087	0.0280	1.1366	0.3002	0.0265	0.3267		2,035.7623	2,035.7623	0.1124		2,038.5731

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679
Total	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1210	4.0732	1.0380	0.0108	0.2708	8.5500e-003	0.2793	0.0780	8.1800e-003	0.0861		1,165.4078	1,165.4078	0.0833		1,167.4896
Worker	0.3528	0.2292	2.7054	8.3400e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		830.7297	830.7297	0.0237		831.3224
Total	0.4738	4.3024	3.7434	0.0192	1.1087	0.0143	1.1230	0.3002	0.0135	0.3137		1,996.1375	1,996.1375	0.1070		1,998.8120

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679
Total	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1210	4.0732	1.0380	0.0108	0.2708	8.5500e-003	0.2793	0.0780	8.1800e-003	0.0861		1,165.4078	1,165.4078	0.0833		1,167.4896
Worker	0.3528	0.2292	2.7054	8.3400e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		830.7297	830.7297	0.0237		831.3224
Total	0.4738	4.3024	3.7434	0.0192	1.1087	0.0143	1.1230	0.3002	0.0135	0.3137		1,996.1375	1,996.1375	0.1070		1,998.8120

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7021	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740
Total	21.5842	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044
Total	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2201	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740
Total	21.1022	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Summer

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044
Total	0.0692	0.0449	0.5305	1.6300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		162.8882	162.8882	4.6500e-003		163.0044

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Summer

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035
Total	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Summer

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035
Total	0.0553	0.0360	0.4244	1.3100e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		130.3105	130.3105	3.7200e-003		130.4035

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831
Unmitigated	0.1928	0.8577	2.6279	9.1200e-003	0.7572	8.6700e-003	0.7659	0.2024	8.1400e-003	0.2105		925.0218	925.0218	0.0465		926.1831

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCWRP Expansion - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCWRP Expansion - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Unmitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

NCWRP Expansion - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCWRP Expansion - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

NCWRP Expansion - San Diego County APCD Air District, Winter

NCWRP Expansion
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	241.03	1000sqft	5.53	241,034.00	49

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

NCWRP Expansion - San Diego County APCD Air District, Winter

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description.

Construction Phase - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Off-road Equipment - See Section 7.1.2 for Construction Details.

Grading - See Section 7.1.2 for Construction Details.

Demolition - No demolition of structures.

Trips and VMT - See Section 7.1.2 for Construction Details.

On-road Fugitive Dust - CalEEMod defaults.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1.

Vehicle Trips - Based on the traffic information study.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust -

Woodstoves -

Consumer Products -

Area Coating - In accordance with SDAPCD Rule 67.0.1.

Landscape Equipment -

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on information provided by the City.

Solid Waste - EPA waste generation of 4.46 lb/person/day.

Construction Off-road Equipment Mitigation - Per MM-AQ-1, all construction equipment must be at least Tier 3.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1.

NCWRP Expansion - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	230.00	428.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	NumDays	20.00	150.00
tblConstructionPhase	NumDays	20.00	107.00
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	5/14/2021
tblConstructionPhase	PhaseEndDate	9/30/2018	2/26/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	9/24/2019
tblConstructionPhase	PhaseEndDate	9/30/2018	12/6/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblConstructionPhase	PhaseStartDate	10/1/2018	9/25/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	2/27/2019
tblConstructionPhase	PhaseStartDate	10/1/2018	7/9/2021
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	75.00	0.00
tblGrading	MaterialExported	0.00	1,644.00
tblLandUse	Population	0.00	49.00

NCWRP Expansion - San Diego County APCD Air District, Winter

tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Dumpers/Tenders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2020
tblSolidWaste	SolidWasteGenerationRate	298.88	8.83

NCWRP Expansion - San Diego County APCD Air District, Winter

tblTripsAndVMT	HaulingTripNumber	206.00	1,009.00
tblTripsAndVMT	WorkerTripNumber	101.00	102.00
tblTripsAndVMT	WorkerTripNumber	15.00	16.00
tblTripsAndVMT	WorkerTripNumber	28.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TTP	13.00	100.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.32	0.35
tblVehicleTrips	SU_TR	0.68	0.10
tblVehicleTrips	WD_TR	6.97	0.10
tblWater	IndoorWaterUseRate	55,738,187.50	312,000.00

2.0 Emissions Summary

NCWRP Expansion - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	3.7959	38.3776	22.8236	0.0402	0.1314	1.9395	2.0709	0.0349	1.8057	1.8406	0.0000	4,006.5389	4,006.5389	1.0714	0.0000	4,033.3235
2019	3.5844	35.8322	22.5279	0.0490	6.2726	1.7958	7.8647	3.3775	1.6705	4.8470	0.0000	4,819.0407	4,819.0407	1.1704	0.0000	4,835.6724
2020	2.8947	25.0823	21.4574	0.0486	1.1087	1.1764	2.2851	0.3002	1.1235	1.4237	0.0000	4,755.6369	4,755.6369	0.6448	0.0000	4,771.7573
2021	22.6187	22.8160	20.8759	0.0482	1.1087	1.0065	2.1151	0.3002	0.9610	1.2612	0.0000	4,718.0308	4,718.0308	0.7042	0.0000	4,733.7548
Maximum	22.6187	38.3776	22.8236	0.0490	6.2726	1.9395	7.8647	3.3775	1.8057	4.8470	0.0000	4,819.0407	4,819.0407	1.1704	0.0000	4,835.6724

NCWRP Expansion - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Total	5.9606	0.8905	2.5593	8.6500e-003	0.7572	8.8000e-003	0.7660	0.2024	8.2600e-003	0.2107		877.7462	877.7462	0.0463	0.0000	878.9028

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Total	5.9606	0.8905	2.5593	8.6500e-003	0.7572	8.8000e-003	0.7660	0.2024	8.2600e-003	0.2107		877.7462	877.7462	0.0463	0.0000	878.9028

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/1/2018	2/26/2019	5	107	
2	Grading	Grading	2/27/2019	9/24/2019	5	150	
3	Building Construction	Building Construction	9/25/2019	5/14/2021	5	428	
4	Architectural Coating	Architectural Coating	7/9/2021	12/6/2021	5	107	
5	Paving	Paving	7/9/2021	12/6/2021	5	107	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 361,551; Non-Residential Outdoor: 120,517; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NCWRP Expansion - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cement and Mortar Mixers	1	8.00	9	0.56
Architectural Coating	Cranes	1	8.00	231	0.29
Paving	Dumpers/Tenders	1	8.00	16	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pumps	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
	Concrete/Industrial Saws	1	8.00	81	0.73
	Dumpers/Tenders	1	8.00	16	0.38
Paving	Paving Equipment	2	8.00	132	0.36
	Excavators	1	8.00	158	0.38
	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Dumpers/Tenders	2	8.00	16	0.38
Grading	Excavators	2	8.00	158	0.38
Grading	Plate Compactors	2	8.00	8	0.43
Building Construction	Welders	1	8.00	46	0.45
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

NCWRP Expansion - San Diego County APCD Air District, Winter

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	11	16.00	0.00	1,009.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	16.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891
Total	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	1.4031	22.5716	24.5968	0.0388		1.0913	1.0913		1.0669	1.0669	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891
Total	0.0769	0.0551	0.5196	1.3500e-003	0.1314	9.5000e-004	0.1324	0.0349	8.7000e-004	0.0357		134.7724	134.7724	4.6700e-003		134.8891

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	1.3873	22.3288	24.5506	0.0388		1.0804	1.0804		1.0569	1.0569	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

NCWRP Expansion - San Diego County APCD Air District, Winter

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0236	0.0000	6.0236	3.3105	0.0000	3.3105			0.0000			0.0000
Off-Road	3.0711	32.4903	20.5118	0.0373		1.5833	1.5833		1.4611	1.4611		3,643.8830	3,643.8830	1.1128		3,671.7017
Total	3.0711	32.4903	20.5118	0.0373	6.0236	1.5833	7.6070	3.3105	1.4611	4.7716		3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0600	2.0412	0.4674	5.2500e-003	0.1175	7.8000e-003	0.1253	0.0322	7.4700e-003	0.0397		572.3780	572.3780	0.0534		573.7126
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1311	2.0905	0.9352	6.5600e-003	0.2490	8.7400e-003	0.2577	0.0671	8.3300e-003	0.0754		703.0842	703.0842	0.0576		704.5243

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7106	0.0000	2.7106	1.4897	0.0000	1.4897			0.0000			0.0000
Off-Road	1.7634	24.1281	21.1198	0.0373		1.1540	1.1540		1.0972	1.0972	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017
Total	1.7634	24.1281	21.1198	0.0373	2.7106	1.1540	3.8646	1.4897	1.0972	2.5869	0.0000	3,643.8830	3,643.8830	1.1128		3,671.7017

NCWRP Expansion - San Diego County APCD Air District, Winter

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0600	2.0412	0.4674	5.2500e-003	0.1175	7.8000e-003	0.1253	0.0322	7.4700e-003	0.0397		572.3780	572.3780	0.0534		573.7126
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0492	0.4678	1.3100e-003	0.1314	9.4000e-004	0.1324	0.0349	8.6000e-004	0.0357		130.7062	130.7062	4.2200e-003		130.8116
Total	0.1311	2.0905	0.9352	6.5600e-003	0.2490	8.7400e-003	0.2577	0.0671	8.3300e-003	0.0754		703.0842	703.0842	0.0576		704.5243

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160
Total	2.5707	22.1846	17.7738	0.0298		1.3181	1.3181		1.2589	1.2589		2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1920	4.9635	1.4196	0.0108	0.2708	0.0351	0.3059	0.0780	0.0336	0.1115		1,154.0010	1,154.0010	0.0973		1,156.4323
Worker	0.4530	0.3139	2.9824	8.3700e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		833.2520	833.2520	0.0269		833.9242
Total	0.6450	5.2774	4.4020	0.0191	1.1087	0.0411	1.1498	0.3002	0.0391	0.3393		1,987.2530	1,987.2530	0.1241		1,990.3564

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160
Total	1.4950	17.6580	18.2138	0.0298		1.1206	1.1206		1.0847	1.0847	0.0000	2,831.7876	2,831.7876	0.5411		2,845.3160

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1920	4.9635	1.4196	0.0108	0.2708	0.0351	0.3059	0.0780	0.0336	0.1115		1,154.0010	1,154.0010	0.0973		1,156.4323
Worker	0.4530	0.3139	2.9824	8.3700e-003	0.8379	5.9700e-003	0.8439	0.2223	5.5000e-003	0.2278		833.2520	833.2520	0.0269		833.9242
Total	0.6450	5.2774	4.4020	0.0191	1.1087	0.0411	1.1498	0.3002	0.0391	0.3393		1,987.2530	1,987.2530	0.1241		1,990.3564

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414
Total	2.3142	20.2925	17.4563	0.0298		1.1480	1.1480		1.0966	1.0966		2,802.8335	2,802.8335	0.5283		2,816.0414

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.1566	4.5067	1.2752	0.0107	0.2708	0.0225	0.2933	0.0780	0.0215	0.0995		1,145.8489	1,145.8489	0.0922			1,148.1539
Worker	0.4239	0.2832	2.7259	8.1000e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		806.9546	806.9546	0.0243			807.5620
Total	0.5805	4.7898	4.0011	0.0188	1.1087	0.0284	1.1371	0.3002	0.0269	0.3271		1,952.8035	1,952.8035	0.1165			1,955.7159

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.8334	2,802.8334	0.5283			2,816.0414
Total	1.3848	16.7928	18.1373	0.0298		1.0319	1.0319		1.0008	1.0008	0.0000	2,802.8334	2,802.8334	0.5283			2,816.0414

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1566	4.5067	1.2752	0.0107	0.2708	0.0225	0.2933	0.0780	0.0215	0.0995		1,145.8489	1,145.8489	0.0922		1,148.1539
Worker	0.4239	0.2832	2.7259	8.1000e-003	0.8379	5.8800e-003	0.8438	0.2223	5.4200e-003	0.2277		806.9546	806.9546	0.0243		807.5620
Total	0.5805	4.7898	4.0011	0.0188	1.1087	0.0284	1.1371	0.3002	0.0269	0.3271		1,952.8035	1,952.8035	0.1165		1,955.7159

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679
Total	2.0839	18.4963	17.1770	0.0298		0.9918	0.9918		0.9471	0.9471		2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1275	4.0623	1.1558	0.0106	0.2708	8.9000e-003	0.2797	0.0780	8.5100e-003	0.0865		1,135.2772	1,135.2772	0.0884		1,137.4882
Worker	0.4001	0.2573	2.5431	7.8300e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		779.8385	779.8385	0.0224		780.3986
Total	0.5276	4.3196	3.6989	0.0184	1.1087	0.0147	1.1234	0.3002	0.0138	0.3140		1,915.1157	1,915.1157	0.1108		1,917.8869

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679
Total	1.2825	15.9688	18.0647	0.0298		0.9486	0.9486		0.9218	0.9218	0.0000	2,802.9150	2,802.9150	0.5181		2,815.8679

NCWRP Expansion - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1275	4.0623	1.1558	0.0106	0.2708	8.9000e-003	0.2797	0.0780	8.5100e-003	0.0865		1,135.2772	1,135.2772	0.0884		1,137.4882
Worker	0.4001	0.2573	2.5431	7.8300e-003	0.8379	5.7900e-003	0.8437	0.2223	5.3300e-003	0.2276		779.8385	779.8385	0.0224		780.3986
Total	0.5276	4.3196	3.6989	0.0184	1.1087	0.0147	1.1234	0.3002	0.0138	0.3140		1,915.1157	1,915.1157	0.1108		1,917.8869

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7021	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740
Total	21.5842	6.8534	4.3933	9.6900e-003		0.3211	0.3211		0.3054	0.3054		930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.8821					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2201	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740
Total	21.1022	4.5324	5.4950	9.6900e-003		0.2301	0.2301		0.2301	0.2301	0.0000	930.3421	930.3421	0.2053		935.4740

NCWRP Expansion - San Diego County APCD Air District, Winter

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8933	8.8645	10.1188	0.0162		0.4522	0.4522		0.4174	0.4174		1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Winter

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155
Total	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5640	7.5837	10.6296	0.0162		0.4024	0.4024		0.3871	0.3871	0.0000	1,559.0015	1,559.0015	0.4910		1,571.2776

NCWRP Expansion - San Diego County APCD Air District, Winter

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155
Total	0.0628	0.0404	0.3989	1.2300e-003	0.1314	9.1000e-004	0.1323	0.0349	8.4000e-004	0.0357		122.3276	122.3276	3.5100e-003		122.4155

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465
Unmitigated	0.1879	0.8903	2.5345	8.6500e-003	0.7572	8.7100e-003	0.7659	0.2024	8.1700e-003	0.2106		877.6934	877.6934	0.0461		878.8465

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	24.10	83.84	24.10	138,996	138,996
Total	24.10	83.84	24.10	138,996	138,996

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	11.70	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271

5.0 Energy Detail

Historical Energy Use: N

NCWRP Expansion - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

NCWRP Expansion - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

NCWRP Expansion - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Unmitigated	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

NCWRP Expansion - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3300e-003	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563
Total	5.7726	2.3000e-004	0.0248	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0528	0.0528	1.4000e-004		0.0563

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

NCWRP Expansion - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Annual

North City Pump Station
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

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tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-21-2019	8-20-2019	1.0694	0.7455
2	8-21-2019	11-20-2019	0.6779	0.4609
3	11-21-2019	2-20-2020	0.6472	0.4605
4	2-21-2020	5-20-2020	0.6084	0.4496
5	5-21-2020	8-20-2020	0.3769	0.2823
		Highest	1.0694	0.7455

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0240	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0444	0.1065	3.8200e-003	1.0000e-005	0.2045

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0589	0.0000	0.0589	3.4800e-003	0.0000	0.1458
Water						0.0000	0.0000		0.0000	0.0000	3.3000e-003	0.0443	0.0476	3.4000e-004	1.0000e-005	0.0586
Total	0.0224	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0622	0.0443	0.1065	3.8200e-003	1.0000e-005	0.2045

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.66	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.05	0.00	0.00	0.02

3.0 Construction Detail

Construction Phase

North City Pump Station - San Diego County APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0225	0.2363	0.1233	2.1000e-004		0.0121	0.0121		0.0112	0.0112	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186
Total	0.0225	0.2363	0.1233	2.1000e-004	0.0903	0.0121	0.1025	0.0497	0.0112	0.0608	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186

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3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2300e-003	0.1051	0.1325	2.1000e-004		5.0100e-003	5.0100e-003		5.0100e-003	5.0100e-003	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186
Total	5.2300e-003	0.1051	0.1325	2.1000e-004	0.0407	5.0100e-003	0.0457	0.0223	5.0100e-003	0.0274	0.0000	19.1670	19.1670	6.0600e-003	0.0000	19.3186

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3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866
Total	4.1000e-004	3.2000e-004	3.0700e-003	1.0000e-005	8.4000e-004	1.0000e-005	8.5000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	0.7859	0.7859	3.0000e-005	0.0000	0.7866

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0846	0.7137	0.6565	1.1600e-003		0.0389	0.0389		0.0366	0.0366	0.0000	101.4245	101.4245	0.0274	0.0000	102.1090
Total	0.0846	0.7137	0.6565	1.1600e-003		0.0389	0.0389		0.0366	0.0366	0.0000	101.4245	101.4245	0.0274	0.0000	102.1090

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3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0299	0.5952	0.7586	1.1600e-003		0.0332	0.0332		0.0332	0.0332	0.0000	101.4244	101.4244	0.0274	0.0000	102.1089
Total	0.0299	0.5952	0.7586	1.1600e-003		0.0332	0.0332		0.0332	0.0332	0.0000	101.4244	101.4244	0.0274	0.0000	102.1089

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3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691
Total	2.5600e-003	1.9700e-003	0.0190	5.0000e-005	5.2100e-003	4.0000e-005	5.2500e-003	1.3900e-003	4.0000e-005	1.4200e-003	0.0000	4.8652	4.8652	1.6000e-004	0.0000	4.8691

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1025	0.8665	0.7052	1.1000e-003		0.0486	0.0486		0.0455	0.0455	0.0000	95.2979	95.2979	0.0275	0.0000	95.9843
Total	0.1025	0.8665	0.7052	1.1000e-003		0.0486	0.0486		0.0455	0.0455	0.0000	95.2979	95.2979	0.0275	0.0000	95.9843

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0121	3.2400e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5505	2.5505	2.0000e-004	0.0000	2.5556
Worker	4.9200e-003	3.7800e-003	0.0365	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	9.3412	9.3412	3.0000e-004	0.0000	9.3488
Total	5.3700e-003	0.0158	0.0398	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8400e-003	1.5000e-004	2.9900e-003	0.0000	11.8918	11.8918	5.0000e-004	0.0000	11.9044

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0313	0.6208	0.7327	1.1000e-003		0.0377	0.0377		0.0377	0.0377	0.0000	95.2978	95.2978	0.0275	0.0000	95.9842
Total	0.0313	0.6208	0.7327	1.1000e-003		0.0377	0.0377		0.0377	0.0377	0.0000	95.2978	95.2978	0.0275	0.0000	95.9842

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.5000e-004	0.0121	3.2400e-003	3.0000e-005	6.4000e-004	8.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5505	2.5505	2.0000e-004	0.0000	2.5556
Worker	4.9200e-003	3.7800e-003	0.0365	1.0000e-004	0.0100	7.0000e-005	0.0101	2.6600e-003	7.0000e-005	2.7300e-003	0.0000	9.3412	9.3412	3.0000e-004	0.0000	9.3488
Total	5.3700e-003	0.0158	0.0398	1.3000e-004	0.0107	1.5000e-004	0.0108	2.8400e-003	1.5000e-004	2.9900e-003	0.0000	11.8918	11.8918	5.0000e-004	0.0000	11.9044

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1288	1.1124	0.9629	1.5400e-003		0.0592	0.0592		0.0554	0.0554	0.0000	130.6728	130.6728	0.0378	0.0000	131.6186
Total	0.1288	1.1124	0.9629	1.5400e-003		0.0592	0.0592		0.0554	0.0554	0.0000	130.6728	130.6728	0.0378	0.0000	131.6186

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3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0153	4.0600e-003	4.0000e-005	8.9000e-004	7.0000e-005	9.6000e-004	2.6000e-004	7.0000e-005	3.3000e-004	0.0000	3.5357	3.5357	2.7000e-004	0.0000	3.5425
Worker	6.4200e-003	4.7500e-003	0.0466	1.4000e-004	0.0140	1.0000e-004	0.0141	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6273	12.6273	3.8000e-004	0.0000	12.6368
Total	6.9300e-003	0.0200	0.0507	1.8000e-004	0.0149	1.7000e-004	0.0150	3.9700e-003	1.6000e-004	4.1300e-003	0.0000	16.1631	16.1631	6.5000e-004	0.0000	16.1793

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0437	0.8665	1.0227	1.5400e-003		0.0526	0.0526		0.0526	0.0526	0.0000	130.6726	130.6726	0.0378	0.0000	131.6184
Total	0.0437	0.8665	1.0227	1.5400e-003		0.0526	0.0526		0.0526	0.0526	0.0000	130.6726	130.6726	0.0378	0.0000	131.6184

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3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.1000e-004	0.0153	4.0600e-003	4.0000e-005	8.9000e-004	7.0000e-005	9.6000e-004	2.6000e-004	7.0000e-005	3.3000e-004	0.0000	3.5357	3.5357	2.7000e-004	0.0000	3.5425
Worker	6.4200e-003	4.7500e-003	0.0466	1.4000e-004	0.0140	1.0000e-004	0.0141	3.7100e-003	9.0000e-005	3.8000e-003	0.0000	12.6273	12.6273	3.8000e-004	0.0000	12.6368
Total	6.9300e-003	0.0200	0.0507	1.8000e-004	0.0149	1.7000e-004	0.0150	3.9700e-003	1.6000e-004	4.1300e-003	0.0000	16.1631	16.1631	6.5000e-004	0.0000	16.1793

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.7900e-003	0.0533	0.0485	9.0000e-005		2.8500e-003	2.8500e-003		2.6700e-003	2.6700e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0112
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7900e-003	0.0533	0.0485	9.0000e-005		2.8500e-003	2.8500e-003		2.6700e-003	2.6700e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0112

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3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264
Total	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.1500e-003	0.0452	0.0589	9.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0111
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.1500e-003	0.0452	0.0589	9.0000e-005		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.0000	7.9562	7.9562	2.2000e-003	0.0000	8.0111

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3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264
Total	1.7000e-004	1.2000e-004	1.2000e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3262	0.3262	1.0000e-005	0.0000	0.3264

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Unmitigated	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004
Total	0.0240	0.0000	5.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-004	1.0000e-004	0.0000	0.0000	1.0000e-004

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.5500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0199					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005
Total	0.0224	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.0000e-005	5.0000e-005	0.0000	0.0000	6.0000e-005

7.0 Water Detail

7.1 Mitigation Measures Water

North City Pump Station - San Diego County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0476	3.4000e-004	1.0000e-005	0.0586
Unmitigated	0.0476	3.4000e-004	1.0000e-005	0.0586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0104 / 0	0.0476	3.4000e-004	1.0000e-005	0.0586
Total		0.0476	3.4000e-004	1.0000e-005	0.0586

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0589	3.4800e-003	0.0000	0.1458
Unmitigated	0.0589	3.4800e-003	0.0000	0.1458

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.29	0.0589	3.4800e-003	0.0000	0.1458
Total		0.0589	3.4800e-003	0.0000	0.1458

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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North City Pump Station - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Summer

North City Pump Station
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

North City Pump Station - San Diego County APCD Air District, Summer

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

North City Pump Station - San Diego County APCD Air District, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

North City Pump Station - San Diego County APCD Air District, Summer

tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

North City Pump Station - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1317	1.0000e-005	5.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000	0.0000	1.2800e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1229	0.0000	3.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000	0.0000	6.8000e-004

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.70	100.00	41.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	45.83	0.00	0.00	46.88

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

North City Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

North City Pump Station - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9955	31.5054	16.4368	0.0284		1.6189	1.6189		1.4894	1.4894		2,817.0663	2,817.0663	0.8913		2,839.3485
Total	2.9955	31.5054	16.4368	0.0284	12.0442	1.6189	13.6631	6.6205	1.4894	8.1098		2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	0.6972	14.0109	17.6633	0.0284		0.6684	0.6684		0.6684	0.6684	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485
Total	0.6972	14.0109	17.6633	0.0284	5.4199	0.6684	6.0882	2.9792	0.6684	3.6476	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Summer

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252
Total	0.0550	0.0384	0.4332	1.2200e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		121.8280	121.8280	3.8900e-003		121.9252

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Summer

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621
Total	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1113	0.3192	0.8685	2.8200e-003	0.2271	3.2500e-003	0.2304	0.0606	3.0500e-003	0.0636		285.4552	285.4552	0.0118		285.7501

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.2100e-003	0.2480	0.0640	5.5000e-004	0.0135	1.7300e-003	0.0153	3.9000e-003	1.6500e-003	5.5500e-003		59.2033	59.2033	4.5700e-003		59.3176
Worker	0.1021	0.0713	0.8045	2.2700e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		226.2519	226.2519	7.2200e-003		226.4325
Total	0.1113	0.3192	0.8685	2.8200e-003	0.2271	3.2500e-003	0.2304	0.0606	3.0500e-003	0.0636		285.4552	285.4552	0.0118		285.7501

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425
Total	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0954	0.0643	0.7370	2.2000e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		219.1142	219.1142	6.5400e-003		219.2778
Total	0.1029	0.2898	0.7944	2.7500e-003	0.2271	2.6000e-003	0.2297	0.0606	2.4400e-003	0.0630		277.9223	277.9223	0.0109		278.1943

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.4700e-003	0.2255	0.0575	5.5000e-004	0.0135	1.1000e-003	0.0146	3.9000e-003	1.0600e-003	4.9500e-003		58.8080	58.8080	4.3400e-003		58.9165
Worker	0.0954	0.0643	0.7370	2.2000e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		219.1142	219.1142	6.5400e-003		219.2778
Total	0.1029	0.2898	0.7944	2.7500e-003	0.2271	2.6000e-003	0.2297	0.0606	2.4400e-003	0.0630		277.9223	277.9223	0.0109		278.1943

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136

North City Pump Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135

North City Pump Station - San Diego County APCD Air District, Summer

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

North City Pump Station - San Diego County APCD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	

North City Pump Station - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

North City Pump Station - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Unmitigated	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1177					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Total	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

North City Pump Station - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Total	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North City Pump Station - San Diego County APCD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

North City Pump Station - San Diego County APCD Air District, Winter

North City Pump Station
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	5.50	1000sqft	0.13	5,500.00	1

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

North City Pump Station - San Diego County APCD Air District, Winter

Demolition - No demolition of structures anticipated.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - CalEEMod defaults.

Area Coating - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - EPA waste generation of 4.46 lb/person/day

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - In accordance with SDAPCD Rule 67.0.1 for interior and exterior architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - No water use mitigation.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

North City Pump Station - San Diego County APCD Air District, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	100.00	230.00
tblConstructionPhase	NumDays	2.00	15.00
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00
tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblLandUse	Population	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	6.82	0.29
tblTripsAndVMT	VendorTripNumber	1.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00

North City Pump Station - San Diego County APCD Air District, Winter

tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	2.00	26.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	1,271,875.00	10,400.00

2.0 Emissions Summary

North City Pump Station - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1317	1.0000e-005	5.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000	0.0000	1.2800e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1229	0.0000	3.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000	0.0000	6.8000e-004

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.70	100.00	41.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.83	45.83	0.00	0.00	46.88

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	5/21/2019	6/10/2019	5	15	
2	Trenching	Trenching	6/11/2019	8/19/2019	5	50	
3	Building Construction	Building Construction	8/20/2019	7/6/2020	5	230	
4	Paving	Paving	7/7/2020	7/13/2020	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

North City Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Off-Highway Trucks	1	8.00	402	0.38
Trenching	Rollers	2	8.00	80	0.38
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Rollers	1	8.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Off-Highway Trucks	1	8.00	402	0.38
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

North City Pump Station - San Diego County APCD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	10	26.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	26.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.0442	0.0000	12.0442	6.6205	0.0000	6.6205			0.0000			0.0000
Off-Road	2.9955	31.5054	16.4368	0.0284		1.6189	1.6189		1.4894	1.4894		2,817.0663	2,817.0663	0.8913		2,839.3485
Total	2.9955	31.5054	16.4368	0.0284	12.0442	1.6189	13.6631	6.6205	1.4894	8.1098		2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4199	0.0000	5.4199	2.9792	0.0000	2.9792			0.0000			0.0000
Off-Road	0.6972	14.0109	17.6633	0.0284		0.6684	0.6684		0.6684	0.6684	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485
Total	0.6972	14.0109	17.6633	0.0284	5.4199	0.6684	6.0882	2.9792	0.6684	3.6476	0.0000	2,817.0663	2,817.0663	0.8913		2,839.3485

North City Pump Station - San Diego County APCD Air District, Winter

3.2 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602
Total	0.0622	0.0431	0.4094	1.1500e-003	0.1150	8.2000e-004	0.1158	0.0305	7.6000e-004	0.0313		114.3679	114.3679	3.6900e-003		114.4602

3.3 Trenching - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348
Total	3.3824	28.5469	26.2597	0.0464		1.5556	1.5556		1.4655	1.4655		4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348
Total	1.1949	23.8092	30.3451	0.0464		1.3279	1.3279		1.3279	1.3279	0.0000	4,472.0551	4,472.0551	1.2072		4,502.2348

North City Pump Station - San Diego County APCD Air District, Winter

3.3 Trenching - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621
Total	2.1351	18.0521	14.6913	0.0230		1.0121	1.0121		0.9470	0.9470		2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1251	0.3282	0.8312	2.6700e-003	0.2271	3.2800e-003	0.2304	0.0606	3.0800e-003	0.0636		270.0976	270.0976	0.0117		270.3905

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,188.4997	2,188.4997	0.6305		2,204.2621

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.6000e-003	0.2482	0.0710	5.4000e-004	0.0135	1.7600e-003	0.0153	3.9000e-003	1.6800e-003	5.5800e-003		57.7001	57.7001	4.8600e-003		57.8216
Worker	0.1155	0.0800	0.7602	2.1300e-003	0.2136	1.5200e-003	0.2151	0.0567	1.4000e-003	0.0581		212.3976	212.3976	6.8500e-003		212.5689
Total	0.1251	0.3282	0.8312	2.6700e-003	0.2271	3.2800e-003	0.2304	0.0606	3.0800e-003	0.0636		270.0976	270.0976	0.0117		270.3905

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425
Total	1.9224	16.6027	14.3715	0.0230		0.8838	0.8838		0.8270	0.8270		2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.1081	0.0722	0.6948	2.0600e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		205.6943	205.6943	6.1900e-003		205.8491
Total	0.1159	0.2975	0.7586	2.5900e-003	0.2271	2.6200e-003	0.2297	0.0606	2.4600e-003	0.0630		262.9868	262.9868	0.0108		263.2568

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425
Total	0.6518	12.9332	15.2636	0.0230		0.7857	0.7857		0.7857	0.7857	0.0000	2,149.8814	2,149.8814	0.6224		2,165.4425

North City Pump Station - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	7.8300e-003	0.2253	0.0638	5.3000e-004	0.0135	1.1200e-003	0.0147	3.9000e-003	1.0800e-003	4.9700e-003		57.2924	57.2924	4.6100e-003		57.4077
Worker	0.1081	0.0722	0.6948	2.0600e-003	0.2136	1.5000e-003	0.2151	0.0567	1.3800e-003	0.0580		205.6943	205.6943	6.1900e-003		205.8491
Total	0.1159	0.2975	0.7586	2.5900e-003	0.2271	2.6200e-003	0.2297	0.0606	2.4600e-003	0.0630		262.9868	262.9868	0.0108		263.2568

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.3142	21.3048	19.4068	0.0364		1.1395	1.1395		1.0676	1.0676		3,508.0941	3,508.0941	0.9688		3,532.3136

North City Pump Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8598	18.0957	23.5463	0.0364		1.0184	1.0184		1.0184	1.0184	0.0000	3,508.0941	3,508.0941	0.9688		3,532.3135

North City Pump Station - San Diego County APCD Air District, Winter

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

5.0 Energy Detail

Historical Energy Use: N

North City Pump Station - San Diego County APCD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

North City Pump Station - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Electric Lawnmower
- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed
- Use Low VOC Cleaning Supplies

North City Pump Station - San Diego County APCD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Unmitigated	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1177					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.0000e-005	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003
Total	0.1317	1.0000e-005	5.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.2000e-003	1.2000e-003	0.0000		1.2800e-003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0140					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1089					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004
Total	0.1229	0.0000	3.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.5000e-004	6.5000e-004	0.0000		6.8000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North City Pump Station - San Diego County APCD Air District, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Renewable Energy Facility
San Diego County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

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tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2020	8-31-2020	0.4558	0.2896
2	9-1-2020	11-30-2020	0.4510	0.2866
3	12-1-2020	2-28-2021	0.4174	0.2825
4	3-1-2021	5-31-2021	0.3917	0.2733
5	6-1-2021	8-31-2021	0.0126	0.0083
		Highest	0.4558	0.2896

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0116	107.5013	107.5129	5.5200e-003	9.2000e-004	107.9259
Total	0.0663	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	107.5016	107.5132	5.5200e-003	9.2000e-004	107.9262

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0116	20.4457	20.4573	2.0100e-003	2.0000e-004	20.5667
Total	0.0614	0.0000	9.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0116	20.4459	20.4575	2.0100e-003	2.0000e-004	20.5669

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.48	0.00	43.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80.98	80.97	63.59	78.26	80.94

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4900e-003	0.0000	1.4900e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	9.5800e-003	0.0942	0.0619	1.0000e-004	1.4900e-003	5.1000e-003	6.5900e-003	2.3000e-004	4.7700e-003	5.0000e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9900e-003	4.6000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5399	0.5399	5.0000e-005	0.0000	0.5411
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	2.4000e-004	2.1300e-003	1.8000e-003	1.0000e-005	5.2000e-004	1.0000e-005	5.3000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.9023	0.9023	6.0000e-005	0.0000	0.9038

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.7000e-004	0.0000	6.7000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	2.4300e-003	0.0518	0.0654	1.0000e-004	6.7000e-004	2.9800e-003	3.6500e-003	1.0000e-004	2.9800e-003	3.0800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.0000e-005	1.9900e-003	4.6000e-004	1.0000e-005	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.5399	0.5399	5.0000e-005	0.0000	0.5411
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	2.4000e-004	2.1300e-003	1.8000e-003	1.0000e-005	5.2000e-004	1.0000e-005	5.3000e-004	1.4000e-004	1.0000e-005	1.5000e-004	0.0000	0.9023	0.9023	6.0000e-005	0.0000	0.9038

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3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0257	0.0000	0.0257	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5800e-003	0.0942	0.0619	1.0000e-004		5.1000e-003	5.1000e-003		4.7700e-003	4.7700e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	9.5800e-003	0.0942	0.0619	1.0000e-004	0.0257	5.1000e-003	0.0308	0.0134	4.7700e-003	0.0182	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

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3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0116	0.0000	0.0116	6.0400e-003	0.0000	6.0400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4300e-003	0.0518	0.0654	1.0000e-004		2.9800e-003	2.9800e-003		2.9800e-003	2.9800e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262
Total	2.4300e-003	0.0518	0.0654	1.0000e-004	0.0116	2.9800e-003	0.0146	6.0400e-003	2.9800e-003	9.0200e-003	0.0000	9.1696	9.1696	2.2700e-003	0.0000	9.2262

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627
Total	1.8000e-004	1.4000e-004	1.3400e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3624	0.3624	1.0000e-005	0.0000	0.3627

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3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1155	1.2136	0.8990	1.5000e-003		0.0678	0.0678		0.0624	0.0624	0.0000	131.4607	131.4607	0.0425	0.0000	132.5236
Total	0.1155	1.2136	0.8990	1.5000e-003		0.0678	0.0678		0.0624	0.0624	0.0000	131.4607	131.4607	0.0425	0.0000	132.5236

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5200e-003	0.0454	0.0121	1.1000e-004	2.6400e-003	2.2000e-004	2.8600e-003	7.6000e-004	2.1000e-004	9.7000e-004	0.0000	10.5017	10.5017	8.0000e-004	0.0000	10.5218
Worker	2.9300e-003	2.1700e-003	0.0213	6.0000e-005	6.3800e-003	5.0000e-005	6.4300e-003	1.7000e-003	4.0000e-005	1.7400e-003	0.0000	5.7700	5.7700	1.7000e-004	0.0000	5.7743
Total	4.4500e-003	0.0475	0.0334	1.7000e-004	9.0200e-003	2.7000e-004	9.2900e-003	2.4600e-003	2.5000e-004	2.7100e-003	0.0000	16.2717	16.2717	9.7000e-004	0.0000	16.2962

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3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0367	0.7891	1.0029	1.5000e-003		0.0465	0.0465		0.0465	0.0465	0.0000	131.4606	131.4606	0.0425	0.0000	132.5235
Total	0.0367	0.7891	1.0029	1.5000e-003		0.0465	0.0465		0.0465	0.0465	0.0000	131.4606	131.4606	0.0425	0.0000	132.5235

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.5200e-003	0.0454	0.0121	1.1000e-004	2.6400e-003	2.2000e-004	2.8600e-003	7.6000e-004	2.1000e-004	9.7000e-004	0.0000	10.5017	10.5017	8.0000e-004	0.0000	10.5218
Worker	2.9300e-003	2.1700e-003	0.0213	6.0000e-005	6.3800e-003	5.0000e-005	6.4300e-003	1.7000e-003	4.0000e-005	1.7400e-003	0.0000	5.7700	5.7700	1.7000e-004	0.0000	5.7743
Total	4.4500e-003	0.0475	0.0334	1.7000e-004	9.0200e-003	2.7000e-004	9.2900e-003	2.4600e-003	2.5000e-004	2.7100e-003	0.0000	16.2717	16.2717	9.7000e-004	0.0000	16.2962

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3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0528	0.5555	0.4464	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	66.7310	66.7310	0.0216	0.0000	67.2706
Total	0.0528	0.5555	0.4464	7.6000e-004		0.0297	0.0297		0.0273	0.0273	0.0000	66.7310	66.7310	0.0216	0.0000	67.2706

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0208	5.5400e-003	5.0000e-005	1.3400e-003	4.0000e-005	1.3800e-003	3.9000e-004	4.0000e-005	4.3000e-004	0.0000	5.2811	5.2811	3.9000e-004	0.0000	5.2909
Worker	1.4000e-003	1.0000e-003	0.0101	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8301	2.8301	8.0000e-005	0.0000	2.8321
Total	2.0200e-003	0.0218	0.0156	8.0000e-005	4.5800e-003	6.0000e-005	4.6400e-003	1.2500e-003	6.0000e-005	1.3100e-003	0.0000	8.1112	8.1112	4.7000e-004	0.0000	8.1230

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3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.4005	0.5090	7.6000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	66.7309	66.7309	0.0216	0.0000	67.2705
Total	0.0186	0.4005	0.5090	7.6000e-004		0.0236	0.0236		0.0236	0.0236	0.0000	66.7309	66.7309	0.0216	0.0000	67.2705

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2000e-004	0.0208	5.5400e-003	5.0000e-005	1.3400e-003	4.0000e-005	1.3800e-003	3.9000e-004	4.0000e-005	4.3000e-004	0.0000	5.2811	5.2811	3.9000e-004	0.0000	5.2909
Worker	1.4000e-003	1.0000e-003	0.0101	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8301	2.8301	8.0000e-005	0.0000	2.8321
Total	2.0200e-003	0.0218	0.0156	8.0000e-005	4.5800e-003	6.0000e-005	4.6400e-003	1.2500e-003	6.0000e-005	1.3100e-003	0.0000	8.1112	8.1112	4.7000e-004	0.0000	8.1230

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3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.2900e-003	0.0394	0.0414	7.0000e-005		2.0600e-003	2.0600e-003		1.9200e-003	1.9200e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.2900e-003	0.0394	0.0414	7.0000e-005		2.0600e-003	2.0600e-003		1.9200e-003	1.9200e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309
Total	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309

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3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.2800e-003	0.0272	0.0394	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.2800e-003	0.0272	0.0394	7.0000e-005		1.6600e-003	1.6600e-003		1.6600e-003	1.6600e-003	0.0000	5.4981	5.4981	1.5800e-003	0.0000	5.5375

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309
Total	3.1000e-004	2.2000e-004	2.2500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6305	0.6305	2.0000e-005	0.0000	0.6309

4.0 Operational Detail - Mobile

Renewable Energy Facility - San Diego County APCD Air District, Annual

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Renewable Energy Facility - San Diego County APCD Air District, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Annual

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Unmitigated	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004

Renewable Energy Facility - San Diego County APCD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0663					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004
Total	0.0663	0.0000	1.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.0000e-004	3.0000e-004	0.0000	0.0000	3.2000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0613					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004
Total	0.0614	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6000e-004	1.6000e-004	0.0000	0.0000	1.7000e-004

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Annual

7.1 Mitigation Measures Water

Use Reclaimed Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	20.4573	2.0100e-003	2.0000e-004	20.5667
Unmitigated	107.5129	5.5200e-003	9.2000e-004	107.9259

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0365 / 29.565	107.5129	5.5200e-003	9.2000e-004	107.9259
Total		107.5129	5.5200e-003	9.2000e-004	107.9259

Renewable Energy Facility - San Diego County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.0365 / 5.58834	20.4573	2.0100e-003	2.0000e-004	20.5667
Total		20.4573	2.0100e-003	2.0000e-004	20.5667

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Renewable Energy Facility - San Diego County APCD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Renewable Energy Facility - San Diego County APCD Air District, Summer

Renewable Energy Facility
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

Renewable Energy Facility - San Diego County APCD Air District, Summer

Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

Renewable Energy Facility - San Diego County APCD Air District, Summer

Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

Renewable Energy Facility - San Diego County APCD Air District, Summer

tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

Renewable Energy Facility - San Diego County APCD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3634	2.0000e-005	1.7400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005	0.0000	3.9600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3362	1.0000e-005	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000	0.0000	2.1100e-003

Renewable Energy Facility - San Diego County APCD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.50	50.00	41.95	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.24	46.24	100.00	0.00	46.72

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Renewable Energy Facility - San Diego County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2990	0.0000	0.2990	0.0453	0.0000	0.0453			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	0.2990	1.0194	1.3184	0.0453	0.9537	0.9990		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0111	0.3906	0.0887	1.1000e-003	0.0245	1.2500e-003	0.0257	6.7000e-003	1.1900e-003	7.9000e-003		119.8857	119.8857	0.0106		120.1497
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0478	0.4153	0.3721	1.9500e-003	0.1066	1.8300e-003	0.1084	0.0285	1.7200e-003	0.0302		204.1604	204.1604	0.0131		204.4874

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1346	0.0000	0.1346	0.0204	0.0000	0.0204			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	0.1346	0.5966	0.7312	0.0204	0.5966	0.6170	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0111	0.3906	0.0887	1.1000e-003	0.0245	1.2500e-003	0.0257	6.7000e-003	1.1900e-003	7.9000e-003		119.8857	119.8857	0.0106		120.1497
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0478	0.4153	0.3721	1.9500e-003	0.1066	1.8300e-003	0.1084	0.0285	1.7200e-003	0.0302		204.1604	204.1604	0.0131		204.4874

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1464	0.0000	5.1464	2.6837	0.0000	2.6837			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	5.1464	1.0194	6.1658	2.6837	0.9537	3.6374		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3159	0.0000	2.3159	1.2077	0.0000	1.2077			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	2.3159	0.5966	2.9125	1.2077	0.5966	1.8043	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376
Total	0.0367	0.0247	0.2835	8.5000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		84.2747	84.2747	2.5200e-003		84.3376

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640
Total	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	0.0443	0.4708	0.3417	1.7800e-003	0.0928	2.6700e-003	0.0955	0.0252	2.5300e-003	0.0278		185.0358	185.0358	0.0107		185.3030

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0294	0.0198	0.2268	6.8000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		67.4198	67.4198	2.0100e-003		67.4701
Total	0.0443	0.4708	0.3417	1.7800e-003	0.0928	2.6700e-003	0.0955	0.0252	2.5300e-003	0.0278		185.0358	185.0358	0.0107		185.3030

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779
Total	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4073	0.1038	1.0800e-003	0.0271	8.6000e-004	0.0279	7.8000e-003	8.2000e-004	8.6100e-003		116.5408	116.5408	8.3300e-003		116.7490
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		65.1553	65.1553	1.8600e-003		65.2018
Total	0.0398	0.4253	0.3160	1.7300e-003	0.0928	1.3100e-003	0.0941	0.0252	1.2400e-003	0.0265		181.6961	181.6961	0.0102		181.9507

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4073	0.1038	1.0800e-003	0.0271	8.6000e-004	0.0279	7.8000e-003	8.2000e-004	8.6100e-003		116.5408	116.5408	8.3300e-003		116.7490
Worker	0.0277	0.0180	0.2122	6.5000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		65.1553	65.1553	1.8600e-003		65.2018
Total	0.0398	0.4253	0.3160	1.7300e-003	0.0928	1.3100e-003	0.0941	0.0252	1.2400e-003	0.0265		181.6961	181.6961	0.0102		181.9507

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

Renewable Energy Facility - San Diego County APCD Air District, Summer

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		146.5994	146.5994	4.1800e-003		146.7040

4.0 Operational Detail - Mobile

Renewable Energy Facility - San Diego County APCD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Renewable Energy Facility - San Diego County APCD Air District, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Renewable Energy Facility - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Summer

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Unmitigated	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Renewable Energy Facility - San Diego County APCD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Total	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3361					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Total	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Summer

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Renewable Energy Facility - San Diego County APCD Air District, Winter

Renewable Energy Facility
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	16.98	1000sqft	0.39	16,975.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Section 1.3, Project Description.

Land Use - See Section 1.3, Project Description. Based on design documents provided by the City.

Construction Phase - Based on information provided by the City.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Off-road Equipment - See Section 7.2.1 for Construction Details.

Trips and VMT - See Section 7.2.1 for trip information.

On-road Fugitive Dust - CalEEMod Defaults.

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Demolition - See Section 7.2.1 for construction details.

Grading - See Section 7.2.1 for Construction Details.

Architectural Coating - No architectural coatings.

Vehicle Trips - See Section 7.2.2 for mobile source information.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Vehicle Emission Factors - CalEEMod defaults.

Road Dust - CalEEMod defaults.

Woodstoves - No hearths.

Consumer Products - No consumer products.

Area Coating - No architectural coatings.

Landscape Equipment - There is no landscaping for this project.

Energy Use - Energy use calculated outside of CalEEMod.

Water And Wastewater - Based on City provided information.

Solid Waste - No solid waste generated.

Land Use Change - No land use change.

Sequestration - No land use change.

Construction Off-road Equipment Mitigation - Per MM1, all construction equipment will be at least Tier 3. See Section 7.2.1 Construction Impacts for more information.

Mobile Land Use Mitigation - No traffic mitigation.

Mobile Commute Mitigation - No traffic mitigation.

Area Mitigation - No architectural coatings. Electric landscape equipment is implemented to show no landscaping equipment as model will not take out the summer days.

Energy Mitigation - No energy mitigation.

Water Mitigation - Reclaimed water use based on Initial Study DEP No. 96-0071.

Waste Mitigation - No solid waste mitigation.

Stationary Sources - Emergency Generators and Fire Pumps - No stationary sources.

Stationary Sources - Process Boilers - No stationary sources.

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Stationary Sources - User Defined - No stationary sources.

Stationary Sources - Emergency Generators and Fire Pumps EF - No stationary sources.

Stationary Sources - Process Boilers EF - No stationary sources.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	0
tblAreaCoating	Area_EF_Nonresidential_Interior	250	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblEnergyUse	LightingElect	2.91	0.00
tblEnergyUse	NT24E	4.27	0.00

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tblEnergyUse	NT24NG	7.25	0.00
tblEnergyUse	T24E	1.27	0.00
tblEnergyUse	T24NG	4.34	0.00
tblGrading	AcresOfGrading	0.00	3.10
tblLandUse	BuildingSpaceSquareFeet	16,980.00	16,975.00
tblLandUse	LandUseSquareFeet	16,980.00	16,975.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	1.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblSolidWaste	SolidWasteGenerationRate	21.06	0.00
tblTripsAndVMT	VendorTripNumber	3.00	4.00
tblTripsAndVMT	WorkerTripNumber	7.00	8.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	3,926,625.00	36,500.00
tblWater	OutdoorWaterUseRate	0.00	29,565,000.00

2.0 Emissions Summary

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3634	2.0000e-005	1.7400e-003	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005	0.0000	3.9600e-003

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.3362	1.0000e-005	1.0100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000	0.0000	2.1100e-003

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.50	50.00	41.95	0.00	0.00	100.00	100.00	0.00	100.00	100.00	0.00	46.24	46.24	100.00	0.00	46.72

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/2/2020	3/13/2020	5	10	
2	Grading	Grading	3/16/2020	3/27/2020	5	10	
3	Building Construction	Building Construction	3/30/2020	5/21/2021	5	300	
4	Paving	Paving	5/24/2021	6/4/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 3.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2990	0.0000	0.2990	0.0453	0.0000	0.0453			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	0.2990	1.0194	1.3184	0.0453	0.9537	0.9990		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0114	0.3943	0.0945	1.0800e-003	0.0245	1.2700e-003	0.0257	6.7000e-003	1.2200e-003	7.9200e-003		117.8290	117.8290	0.0109		118.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0529	0.4221	0.3618	1.8700e-003	0.1066	1.8500e-003	0.1085	0.0285	1.7500e-003	0.0302		196.9422	196.9422	0.0133		197.2748

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3.2 Demolition - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1346	0.0000	0.1346	0.0204	0.0000	0.0204			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	0.1346	0.5966	0.7312	0.0204	0.5966	0.6170	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0114	0.3943	0.0945	1.0800e-003	0.0245	1.2700e-003	0.0257	6.7000e-003	1.2200e-003	7.9200e-003		117.8290	117.8290	0.0109		118.1020
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0529	0.4221	0.3618	1.8700e-003	0.1066	1.8500e-003	0.1085	0.0285	1.7500e-003	0.0302		196.9422	196.9422	0.0133		197.2748

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3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.1464	0.0000	5.1464	2.6837	0.0000	2.6837			0.0000			0.0000
Off-Road	1.9167	18.8412	12.3776	0.0210		1.0194	1.0194		0.9537	0.9537		2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	1.9167	18.8412	12.3776	0.0210	5.1464	1.0194	6.1658	2.6837	0.9537	3.6374		2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.3 Grading - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3159	0.0000	2.3159	1.2077	0.0000	1.2077			0.0000			0.0000
Off-Road	0.4862	10.3690	13.0734	0.0210		0.5966	0.5966		0.5966	0.5966	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0
Total	0.4862	10.3690	13.0734	0.0210	2.3159	0.5966	2.9125	1.2077	0.5966	1.8043	0.0000	2,021.544 2	2,021.544 2	0.4997		2,034.036 0

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727
Total	0.0416	0.0278	0.2673	7.9000e-004	0.0822	5.8000e-004	0.0827	0.0218	5.3000e-004	0.0223		79.1132	79.1132	2.3800e-003		79.1727

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640
Total	1.1604	12.1968	9.0353	0.0150		0.6818	0.6818		0.6273	0.6273		1,456.3883	1,456.3883	0.4710		1,468.1640

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	0.0489	0.4729	0.3413	1.7100e-003	0.0928	2.7100e-003	0.0955	0.0252	2.5700e-003	0.0278		177.8755	177.8755	0.0111		178.1536

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3.4 Building Construction - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.3883	1,456.3883	0.4710		1,468.1639

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0333	0.0222	0.2138	6.4000e-004	0.0657	4.6000e-004	0.0662	0.0174	4.2000e-004	0.0179		63.2906	63.2906	1.9100e-003		63.3382
Total	0.0489	0.4729	0.3413	1.7100e-003	0.0928	2.7100e-003	0.0955	0.0252	2.5700e-003	0.0278		177.8755	177.8755	0.0111		178.1536

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779
Total	1.0461	10.9992	8.8390	0.0150		0.5878	0.5878		0.5408	0.5408		1,456.6006	1,456.6006	0.4711		1,468.3779

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4062	0.1156	1.0600e-003	0.0271	8.9000e-004	0.0280	7.8000e-003	8.5000e-004	8.6500e-003		113.5277	113.5277	8.8400e-003		113.7488
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		61.1638	61.1638	1.7600e-003		61.2077
Total	0.0441	0.4264	0.3150	1.6700e-003	0.0928	1.3400e-003	0.0941	0.0252	1.2700e-003	0.0265		174.6915	174.6915	0.0106		174.9566

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779
Total	0.3690	7.9303	10.0792	0.0150		0.4676	0.4676		0.4676	0.4676	0.0000	1,456.6006	1,456.6006	0.4711		1,468.3779

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4062	0.1156	1.0600e-003	0.0271	8.9000e-004	0.0280	7.8000e-003	8.5000e-004	8.6500e-003		113.5277	113.5277	8.8400e-003		113.7488
Worker	0.0314	0.0202	0.1995	6.1000e-004	0.0657	4.5000e-004	0.0662	0.0174	4.2000e-004	0.0179		61.1638	61.1638	1.7600e-003		61.2077
Total	0.0441	0.4264	0.3150	1.6700e-003	0.0928	1.3400e-003	0.0941	0.0252	1.2700e-003	0.0265		174.6915	174.6915	0.0106		174.9566

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8580	7.8878	8.2789	0.0133		0.4121	0.4121		0.3837	0.3837		1,212.1151	1,212.1151	0.3477		1,220.8063

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

Renewable Energy Facility - San Diego County APCD Air District, Winter

3.5 Paving - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2559	5.4376	7.8889	0.0133		0.3323	0.3323		0.3323	0.3323	0.0000	1,212.1151	1,212.1151	0.3477		1,220.8063

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e-003	0.1479	1.0200e-003	0.1489	0.0392	9.4000e-004	0.0402		137.6186	137.6186	3.9500e-003		137.7174

4.0 Operational Detail - Mobile

Renewable Energy Facility - San Diego County APCD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.598645	0.040929	0.181073	0.106149	0.015683	0.005479	0.016317	0.023976	0.001926	0.001932	0.006016	0.000753	0.001122

Renewable Energy Facility - San Diego County APCD Air District, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Renewable Energy Facility - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

Renewable Energy Facility - San Diego County APCD Air District, Winter

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Unmitigated	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Renewable Energy Facility - San Diego County APCD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003
Total	0.3634	2.0000e-005	1.7400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7200e-003	3.7200e-003	1.0000e-005		3.9600e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3361					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003
Total	0.3362	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.0000e-003	2.0000e-003	0.0000		2.1100e-003

7.0 Water Detail

Renewable Energy Facility - San Diego County APCD Air District, Winter

7.1 Mitigation Measures Water

Use Reclaimed Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Compressor Station Emergency Generator

Emergency Generator Emission Estimates

Operational Equipment - Project Name	OFFROAD Model Category	Engine Tier	Quantity	Engine Rating (hp)	Engine Rating (kW)	Load Factor	Operation (hr/day)	Operation (day/yr)	Emission Factors								Emissions										
									VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	N2O	CO2E
									(g/bhp-hr)								(lb/day)										
Emergency Generator	Generator Sets	4	1	3,353	2,500	0.74	1.0	50	0.1399	0.5	2.6	0.0055	0.02	0.02	568.299	0.018	0.008069	0.77	2.74	14.22	0.03	0.11	0.11	3,108.63	0.10	0.04	-
										(ton/year)							(MT/yr)										
										0.02	0.07	0.36	0.00	0.00	0.00	0.00	70.50	0.00	0.00	70.86							

Emission Factors

Equipment Type	VOC ¹	NOx ¹	CO ²	SOx ²	PM10 ²	PM2.5 ¹	CO2 ³	CH4 ³	N2O ⁴
Generator Sets	0.1399	0.5	2.6	0.0055	0.02	0.02	568.299	0.018	0.008069

Notes: ¹ EPA Tier 4 for 1200+ hp engines

² EPA AP-42, Table 3.4-1, Calculated Value based on Ultra Low Sulfur Diesel

³ Emission factors from CARB OFFROAD 2011, for generators over 1,000 hp

⁴ N2O emission factor based on ratio of CH4 to N2O in diesel fuel from The Climate Registry's 2017 Default Emission Factors

Stationary CH₄ Emissions from Anaerobic Digesters

$$(P \times \text{Digester Gas} \times F_{\text{CH}_4} \times \rho(\text{CH}_4) \times (1-\text{DE}) \times 0.0283 \times 365.25 \times 10^{-6}) \times \text{GWP}$$

		Facility	MGD*	P	MT CO ₂ E
Wastewater per capita	80 gal/day/capita				
Digester Gas [ft ³ /person/day]	1	Rincon	30	375,000	416.98
F CH ₄	0.65				
ρ(CH ₄)	662				
DE	99%				
m ³ /ft ₃	0.0283	Total	30	375,000	417
day/yr	365.25				
MT/g	1.0E-06				
GWP	25				

*peak day net increase

Source: CARB, California Climate Action Registry, ICLEI - Local Governments for Sustainability, 2010.
Local Government Operations Protocol – For the Quantification and Reporting of Greenhouse Gas Emissions Inventories. Version 1.1. May 2010

Process N₂O Emissions from WWTP with Nitrification/Denitrification (MT CO₂E)

$$((P_{\text{total}} \times F_{\text{ind-com}}) \times \text{EF nit/denit} \times 10^{-6}) \times \text{GWP}$$

Wastewater per capita	80 gal/day/capita	Facility	MGD*	P	MT CO ₂ E
F _{ind-com}	1.25	Rincon	21	262,500	684.47
EF nit/denit	7.0				
MT/g	1.0E-06				
GWP	298				
		Total	21	262,500	684

*peak day net increase

Source: CARB, California Climate Action Registry, ICLEI - Local Governments for Sustainability, 2010. *Local Government Operations Protocol – For the Quantification and Reporting of Greenhouse Gas Emissions Inventories*. Version 1.1. May 2010

APPENDIX C

*North City Renewable Energy
Facility Air Modelling Analysis
and Health Risk Assessment Report*

Dudek

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February 2017

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**San Diego's Pure Water Program –
North City Project
Air Quality Analysis and
Health Risk Assessment Report**

San Diego's Pure Water Program – North City Project, Air Quality Analysis and HRA Report

Prepared for:

**Dudek
605 Third Street
Encinitas, CA 92024**

February 2017

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List of Acronyms and Abbreviations

ADMRT	Air Dispersion and Risk Assessment Tool
AQIA	Air Quality Impact Assessment
CARB	California Air Resources Board
CAS	Chemical Abstracts Service
CEQA	California Environmental Quality Act
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DEM	Digital Elevation Model
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	[United States] Environmental Protection Agency
g	Gram
GHG(s)	Greenhouse Gas(es)
GLC	Ground Level Concentration
HARP2	Hotspots Analysis and Reporting Program, Version 2
HI	Hazard Index
HIA	Acute Hazard Index
HIC	Chronic Hazard Index
hr	Hour
HRA	Health Risk Assessment
ICE	Internal Combustion Engine
IPCC	Intergovernmental Panel on Climate Change
°K	Degrees Kelvin
K-12	Kindergarten through 12 th Grade
km	Kilometer
lb(s)	Pound(s)
LFG	Landfill Gas
m	Meter
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
m/s	Meters per Second
MT	Metric Ton
MW	Megawatt
NCWRP	North City Water Reclamation Plant
NEPA	National Environmental Policy Act
N ₂ O	Nitrous Oxide
NO _x	Oxides of Nitrogen
NSCR	Non-Selective Catalytic Reduction
OEHHA	Office of Environmental Health Hazard Assessment
PM _{2.5}	Fine Particulate Matter (Less Than 2.5 Microns in Size)

PM ₁₀	Respirable Particulate Matter (Less Than 10 Microns in Size)
PMI	Point of Maximum Impact
SDAPCD	San Diego County Air Pollution Control District
s	Second
SO _x	Sulfur Oxides
TAC	Toxic Air Contaminant
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
yr	Year
X/Q	Chi over Q – Average Effluent Concentration Normalized by Source Strength (Concentration/Unit Emission Rate)

San Diego's Pure Water Program – North City Project, Air Quality Analysis and HRA Report

1.0 INTRODUCTION

1.1 Pure Water Program North City Project Overview

The City of San Diego (City) is a leader in the potable reuse industry. The City plans to implement a complex water reuse program that addresses both water and wastewater challenges. The City's Pure Water Program is a phased, multi-year program that uses proven technology to produce a safe, reliable, and cost-effective water supply for the City. At full implementation in 2035, the Pure Water Program will provide a third of the City's water supply locally and will reduce the City's ocean wastewater discharges by half.

The first Phase of the City's Pure Water Program is called the North City Project. This project entails the expansion and installation of new power generation capability at the North City Water Reclamation Plant (NCWRP).

1.2 Project Description

The proposed project includes the addition of 15.4 megawatts (MW) of new generation capacity combined with 5 MW of existing power generation capacity at the NCWRP. The new power generation at the NCWRP consists of 6.3 MW of new capacity that uses 100% landfill gas (LFG) as fuel and 9.1 MW of new capacity that uses LFG supplemented with natural gas in 2021, and 3.4 MW of new LFG capacity in 2026.

The system includes a total of seven new internal combustion engines (ICEs) and generator units. Each of these are 3.8 MW Caterpillar Model CG260-16 or equivalent ICEs and generator units. All of the ICEs will be downrated in capacity. Three of these units will be dedicated to using 100% LFG and the remainder can operate on mixed gas, i.e., LFG supplemented with natural gas (all engines could run on 100% natural gas). One engine will always be reserved as a backup and will not operate simultaneously with the other engines. Initially, six engines will be installed, with one to be used as a backup. In 2026, the seventh engine will be installed and an existing 5 MW of generation capacity will be taken offline.

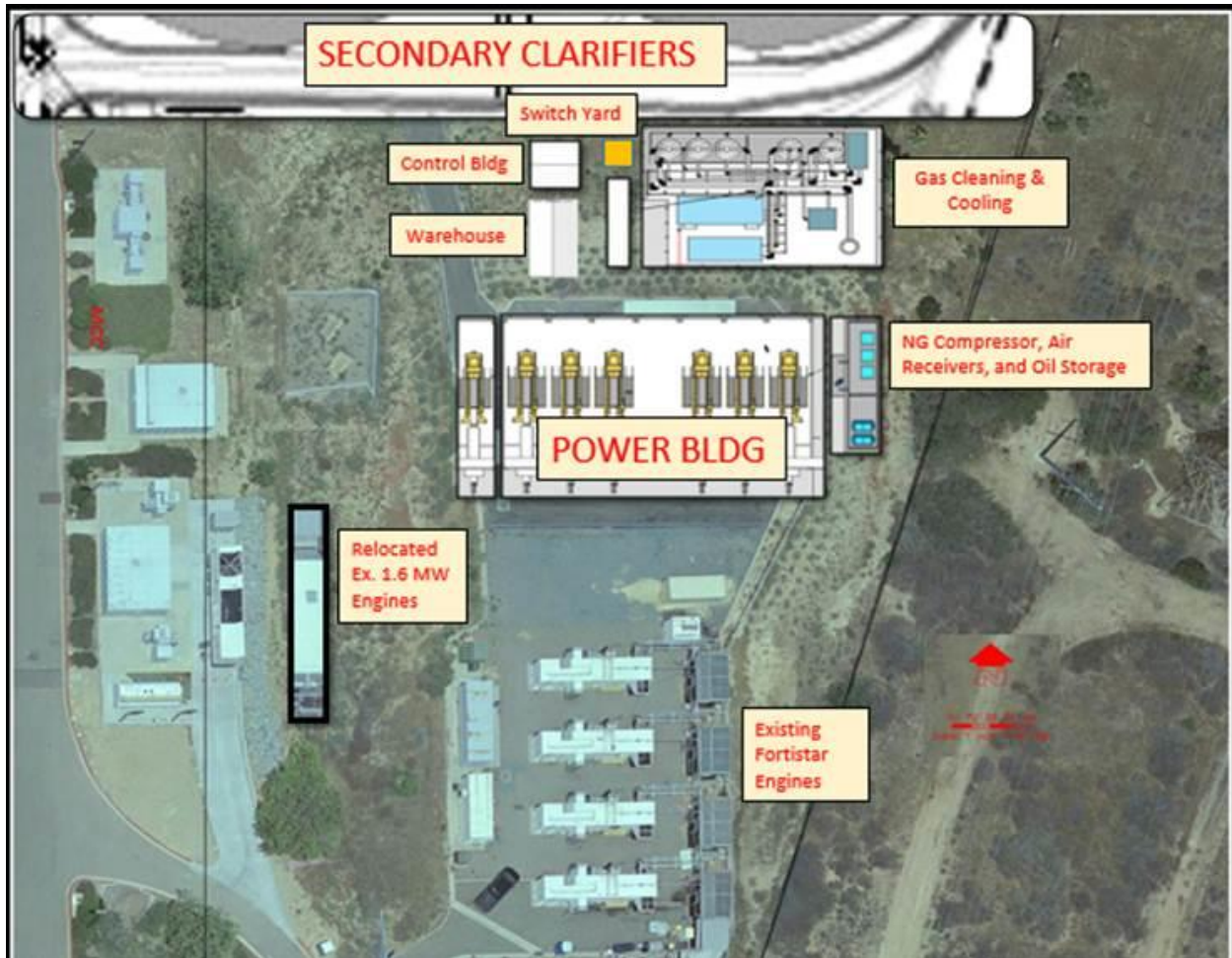
The facility layout includes relocation of the City's existing 1.6 MW engine to a new location on-site near the existing emergency power generation equipment at the NCWRP in order to accommodate the layout of the new power generation facility. Figure 1-1 illustrates a preliminary layout for the new and relocated power generation units at the NCWRP.

The expanded power generation facility covers an area of approximately one half acre and is fully contained within the existing NCWRP property. The new power generation units will receive LFG from the City's Miramar Landfill gas collection system via a new 12-inch diameter gas line that will parallel an existing 10-inch gas line that conveys LFG from the landfill to fuel the existing emergency power generation units at the NCWRP.

A new gas compressor station will be added for the additional gas line described above in order to pressurize and convey the LFG from the landfill to the NCWRP. The new compressor station will

be sited immediately adjacent to an existing gas compressor station located at the landfill and will be powered by electricity from the grid.

Figure 1-1: Project Plot Plan Showing Source and Building Locations



1.3 Project Location

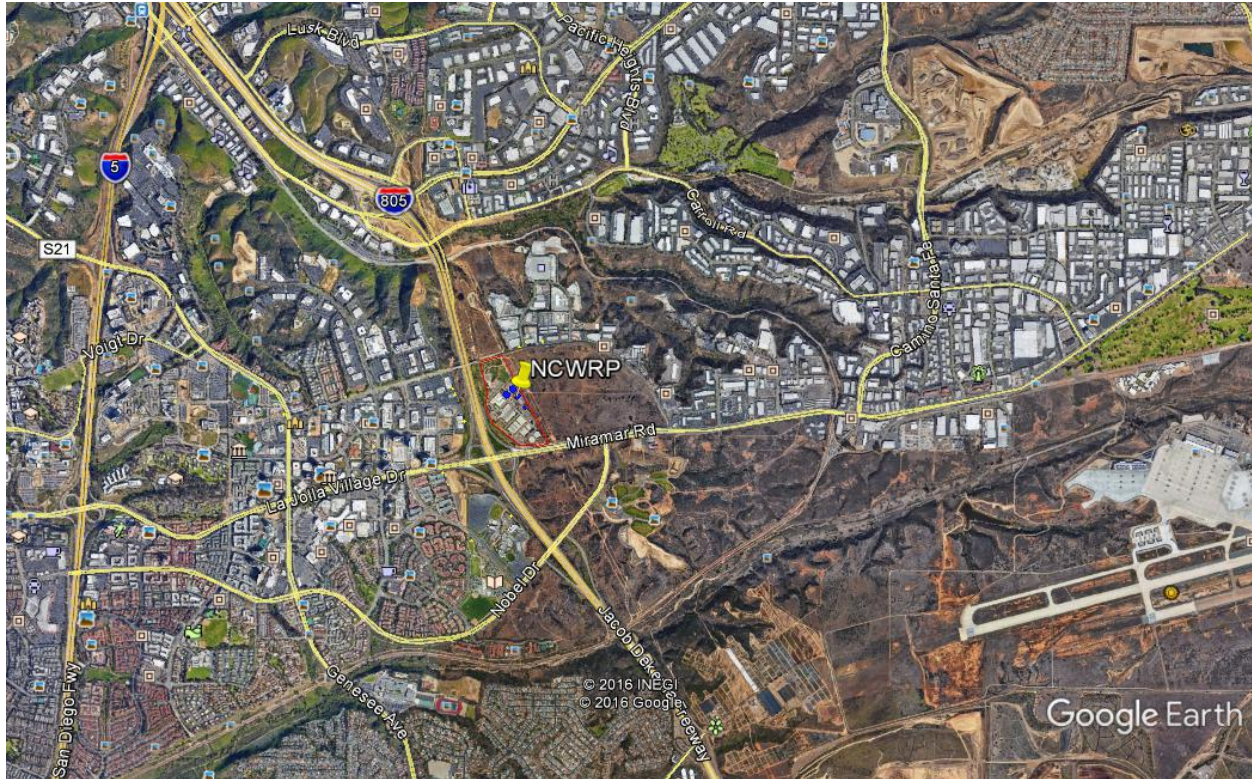
The proposed project will be completely within the existing NCWRP site, which is located at the northeast corner of the intersection of Miramar Road and Interstate 805 in San Diego, CA. Figure 1-2 shows the facility and its immediate surroundings. The site is located in a generally industrial or undeveloped area.

The engines will be placed inside a building located immediately south of the new circular secondary clarifiers and north of the existing emergency power generation facility at the NCWRP. A skid mounted equipment package consisting of a natural gas compressor system, air receivers, and oil storage will be located on the site adjacent to the power generation building. Two additional buildings will be included on the site for control equipment and storage. The facility will also include a gas cleaning and cooling equipment skid and an electrical switch yard.

With respect to air quality and greenhouse gas (GHG) California Environmental Quality Act (CEQA) analyses, the proposed project is within the jurisdiction of the City. It is presumed that the City's requirements related to air quality and GHG impacts under CEQA will also be sufficient

for addressing the project's requirements related to the National Environmental Policy Act (NEPA) for the United States Bureau of Reclamation. For air quality permitting, the proposed project is located within the San Diego County Air Pollution Control District (SDAPCD).

Figure 1-2: Project Location Map and Immediate Surroundings



1.4 Report

This Air Quality and GHG Technical Report has been prepared by Yorke Engineering, LLC (Yorke) in support of the Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) prepared by Dudek for this project. The report discusses the calculation of the emissions of criteria pollutants, toxic air contaminants (TACs), and GHGs due to the operation of the proposed project. It outlines the Health Risk Assessment (HRA) modeling to determine the health impacts due to the TACs. This report addresses the operational emissions calculations and HRA only. Other air quality-related impacts and significance determinations are discussed elsewhere in the Draft EIR/EIS.

2.0 OPERATIONAL EMISSION ESTIMATES

To analyze the air quality impacts from this project, the emission calculations and subsequent HRA examine the simultaneous operation of five ICEs.

Although, ultimately, seven new 3.8 MW Caterpillar Model CG260-16 or equivalent ICEs will be installed, one will always remain as a backup. Additionally, the seventh ICE will not be installed until 2026, at which time 5 MWs of existing generation capacity will be taken offline, more than counterbalancing the emission increase associated with the seventh engine. Therefore, in this analysis, five ICEs are examined, representing the initial installation of six ICEs where one is a backup. The seventh ICE is not examined in this analysis as it will replace a larger and older (more polluting) ICE, thus resulting in a decrease in emissions.

The project also includes the relocation of an existing 1.6 MW engine within the half-acre project site. Since no new emissions are associated with this source, it is not included in this analysis.

Note, emissions related to construction activities are addressed elsewhere in this Draft EIR/EIS.

2.1 Criteria Pollutant Emissions

All of the ICEs can operate on 100% LFG. Three are also designed to run on a combination of LFG and up to 30% natural gas. It is expected that, initially, the ICEs will run on 100% LFG. An engineering evaluation shows that emissions of NO_x are slightly higher when utilizing 100% LFG, as opposed to the combination of LFG and natural gas. In addition, more TACs are emitted from the combustion of the LFG, thus this evaluation examined emissions from all five ICEs combusting 100% LFG at full load.

The LFG will undergo a series of cleanups starting at the compressor station where moisture and large contaminants will be removed, followed by a LFG cleaning and conditioning system on-site at the NCWRP. The gas cleaning equipment is designed to supply clean, dry LFG to the new ICEs.

An oxidation catalyst and Non-Selective Catalyst Reduction (NSCR) post-combustion emission controls will be installed on each of the ICEs to reduce emissions of Carbon Monoxide (CO), volatile organic compounds (VOCs), and Nitrogen Oxides (NO_x).

Based on the expected clean LFG composition, ICE design parameters, and oxidation/NSCR performance, criteria pollutant emissions were estimated. A summary of the criteria pollutant emissions is shown in Table 2-1. Detailed emission calculations are provided in Appendix A.

Table 2-1: Summary of Operational Criteria Pollutant Emissions

Pollutant	Combined Emissions for Five ICEs		
	(lb/hr)	(lb/day)	(tons/yr)
NO _x	5.75	137.9	25.2
CO	4.21	101.1	18.4
VOC	1.04	25.0	4.6
PM ₁₀	0.58	13.8	2.5
PM _{2.5}	0.58	13.8	2.5
SO _x	0.64	15.3	2.8

2.2 TAC Emissions

As noted in Section 2.1, use of 100% LFG as fuel at full load would be also be worst-case for TAC emissions. Therefore, TAC emissions were estimated based on maximum LFG usage per engine and SDAPCD emission factors for LFG-fired engines (SDAPCD 1999). Detailed emission calculations are provided in Appendix A and a summary of the total project's TAC emissions is presented in Table 2-2.

Rather than using emissions-based significance criteria for TACs, an HRA is typically performed to determine the potential for significant impacts. The modeling and risk assessment methodologies are provided in Section 3.0 and the HRA results are provided in Section 4.0. The HRA results demonstrate that the project's TAC emissions are expected to have less than significant impacts.

Table 2-2: Summary of Operational TAC Emissions

TAC	Chemical Abstracts Service (CAS) ID#	Total TAC Emissions for All Five ICES (tons/yr)
Methyl Chloroform (1,1,1-Trichloroethane)	71556	4.60E-03
Acrylonitrile	107131	2.42E-02
Benzene	71432	1.09E-02
Carbon Disulfide	75150	3.20E-03
Carbonyl Sulfide	463581	2.09E-03
Chlorobenzene	108907	2.09E-03
Chloroform	67663	2.79E-04
Ethyl Benzene	100414	3.54E-02
Ethylene Dichloride (EDC)	107062	2.92E-03
Formaldehyde	50000	1.88E-01
Hexane	110543	4.09E-02
Hydrochloric Acid	7647010	1.03E+01
Hydrogen Sulfide	7783064	8.75E-02
Methyl Ethyl Ketone (2-Butanone)	78933	3.70E-02
Methyl Isobutyl Ketone (Hexone)	108101	1.35E-02
Methyl Chloride (Chloromethane)	74873	8.79E-02
Perchloroethylene (Tetrachloroethene)	127184	4.47E-02
Toluene	108883	2.62E-01
Trichloroethylene	79016	2.67E-02
Vinyl Chloride	75014	3.31E-02
Vinylidene Chloride	75354	1.39E-03
Xylenes (Mixed)	1330207	9.29E-02

2.3 GHG Emissions

Project GHG emissions were estimated for two cases, specifically:

1. Five ICEs using 100% LFG; and
2. Two ICEs using 100% LFG and three ICEs using 70% LFG and 30% natural gas.

Emissions were based on maximum landfill or natural gas usage per engine and the Intergovernmental Panel on Climate Change (IPCC) emission factors for landfill and natural gas combustion (IPCC 2006). Detailed emission calculations for both cases are provided in Appendix A.

The LFG to be used in the project is generated at the nearby Miramar Landfill and is currently being emitted from the surface of the landfill or flared. This LFG is a biogenic source of GHGs, i.e., GHG emissions related to nature’s carbon cycle from the biological decomposition of waste in the landfill. Biogenic GHG emissions associated with the LFG already occur and can be considered baseline conditions, and are not an impact generated by the project. Therefore, non-biogenic GHG emissions from the combustion of natural gas in Case 2 generate the maximum project-related new GHG emissions. The amount of supplemental natural gas combusted per engine will fluctuate. Thus, these emissions are a conservative estimate. In actual practices, GHG emissions are expected to be significantly lower.

For completeness, both biogenic and non-biogenic GHG emissions associated with Case 2 are presented in Table 2-3 and broken down by the specific greenhouse gas and summed in terms of carbon dioxide equivalents (CO₂e) in metric tons (MT) per year. Furthermore, note that only the non-biogenic GHG emissions are considered to be an impact associated with the proposed project.

Table 2-3: Summary of Operational GHG Emissions

Greenhouse Gas	Biogenic Emissions from Two 100% LFG ICEs and Three 70% LFG ICEs (MT/yr)	Non-Biogenic Emissions from Three 30% Natural Gas ICEs (MT/yr)	Total Project Emissions (MT/yr)
Carbon Dioxide (CO ₂)	76,370	30,889	107,259
Methane (CH ₄)	6.99	2.85	9.85
Nitrous Oxide (N ₂ O)	0.14	0.06	0.20
Total CO ₂ e	76,586	30,978	107,564

Notes:

- 1) This table presents Case 2 GHG emissions.
- 2) Biogenic GHG emissions are from two ICEs operating on 100% LFG and the portion due to combustion associated with LFG in three of the ICEs when combusting a blend of fuels that use 70% LFG.
- 3) Non-biogenic GHG emissions reflect the portion due to combustion associated with natural gas in three of the ICEs when combusting a blend of fuels that use 30% natural gas.

3.0 MODELING AND RISK ASSESSMENT METHODOLOGIES

This section of the report discusses the methodology and model inputs that were used to develop the air dispersion modeling and subsequent HRA. The results of the modeling are provided in Section 4.0.

To assess the potential human health risks posed by the project's TAC emissions, an HRA was conducted following the methodologies outlined in the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA 2015) and SDAPCD Supplemental Guidelines for Submission of Air Toxics "Hot Spots" Program Health Risk Assessments (HRAs) (SDAPCD 2015).

3.1 Air Dispersion Modeling Methodologies

Air dispersion models calculate the atmospheric transport and fate of pollutants from the emission source. The models calculate the concentration of selected pollutants at specific downwind ground level points, such as residential or off-site workplace receptors. The transformation (fate) of an airborne pollutant, its movement with the prevailing winds (transport), its crosswind and vertical movement due to atmospheric turbulence (dispersion), and its removal due to dry and wet deposition are influenced by the pollutant's physical and chemical properties and by meteorological and environmental conditions. Factors, such as distance from the source to the receptor, meteorological conditions, intervening land use and terrain, pollutant release characteristics, and background pollutant concentrations, affect the predicted air concentration of an air pollutant. Air dispersion models take all of these factors into consideration when calculating downwind ground level pollutant concentrations.

The operation of the project will result in the emissions of TACs. Thus, a refined HRA using air dispersion modeling was performed using the United States Environmental Protection Agency's (EPA's) AERMOD modeling system (computer software) to assess the health risk impacts of the project's operational emissions. AERMOD is a steady-state Gaussian plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including the treatment of both surface and elevated sources, building downwash, and simple and complex terrain. Appendix B provides the AERMOD input file. Principal parameters of this modeling include:

- **Model Version Selection:** The air dispersion model used for the HRA was AERMOD Version 16216r. The modeling files were setup in the Lakes Environmental Software implementation/user interface, AERMOD View™ Version 9.2.0, although AERMOD was run independently to utilize the newest version. AERMOD was run with all sources emitting unit emissions [1 gram per second (g/s)] to obtain the "X/Q" values for the 1-hour and period averaging time option per receptor. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources for input into the Hotspots Analysis and Reporting Program, version 2 (HARP2).
- **Model Options:** The modeling included the use of all standard regulatory default options, including the use of rural dispersion parameters and elevated terrain.

- **Coordinate System:** All geographical coordinates referenced in this section and appendices are in the Universal Transverse Mercator (UTM) coordinate system with the WGS84 Datum, zone 11.
- **Meteorological Data:** AERMOD-specific meteorological data for the Miramar Marine Corps Station #722931 were used for the dispersion modeling. The 5-year meteorological dataset from 2009 through early 2014 was obtained from the Air Quality Planning and Science Division of the California Air Resources Board (CARB) in a preprocessed format suitable for use in AERMOD and HARP2 modeling (CARB 2015).
- **Elevation Data:** Digital elevation data were imported into AERMOD and elevations were assigned to receptors, buildings, and emission sources, as necessary. Digital elevation data were obtained through the AERMOD View™ WebGIS import feature in the United States Geological Survey's (USGS') Digital Elevation Model (DEM 7.5) format, with a resolution of 1 degree.
- **Receptors:** Model results were obtained at various locations around the facility. These receptor locations were identified as the facility boundary, a grid network of receptors to establish the impact area and area where the maximum impact would occur, and discrete receptors that were positioned at specific locations of concern, namely the nearest residences, worker, and sensitive receptors.

The facility boundary was established from an aerial map. Receptors were placed every 50 meters (m) along the fenceline. Grid receptors were placed every 100 m out to 1 kilometer (km), then every 250 m out to 2 km to ensure impacts were below the appropriate CEQA thresholds at all locations off-site.

Based on SDAPCD HRA guidance (SDAPCD 2015), sensitive receptors include schools [kindergarten through grade 12 (K-12)], day care centers, nursing homes, retirement homes, health clinics, hospitals, playgrounds, and athletic facilities within 2 km of the facility. Discrete Cartesian receptors were used to evaluate the location of the maximally exposed residence, sensitive, and off-site workplace. A list of the sensitive and residential receptors within two km of the facilities is provided in Table 3-1. The AERMOD input file presented in Appendix B only includes the sensitive receptors for brevity, but all receptors were included in the modeling assessment. A series of receptors were placed along the worker locations to the west and northeast of the project. Figure 3-1 shows the locations of the discrete receptors, with the property line identified in red.

- **Emission Sources and Release Parameters:** The exhaust stacks from the LFG ICEs were modeled as individual point sources. Each emission source was sited using the plot plan provided, Figure 1-1, and incorporated into AERMOD as shown in red on Figure 3-2. The release parameters for the ICEs are shown in Table 3-2 and were calculated from data provided in the engineering evaluation of the engines for 100% load case. There are six engines, with one as a backup. Thus, no more than five engines will operate simultaneously. The western most five engines were included in the HRA since the closest receptors are to the west of the project.
- **On-Site Buildings:** For the operational scenario, a total of seven on-site buildings close to the emission sources were included in the modeling using best available dimensional data. Buildings less than 20 feet or greater than 250 feet from the new sources were not included

in the assessment. Building downwash effects were assessed using BPIP/PRIME. The buildings included in AERMOD are shown in blue on Figure 3-2.

Table 3-1: Nearby Sensitive and Residential Receptors

Name	UTM Easting (m)	UTM Northing (m)	Distance to Receptor from the Power Units (km)
Torah High School	480727.2	3636989	1.2
La Jolla Country Day	479941.9	3637767	1.6
Childtime	480393.8	3636961	1.5
UCSD Hospital	479201.2	3637859	2.3
Bright Daycare	480662.0	3637527	0.9
Nobel Recreation Center Park	481221.6	3636913	1.0
Resident 1	481019.9	3637371	0.7
Resident 2	481054.5	3637291	0.8
Resident 3	480556.9	3637550	1.0
Resident 4	480367.3	3637887	1.2

Figure 3-1: Facility with Discrete Receptors

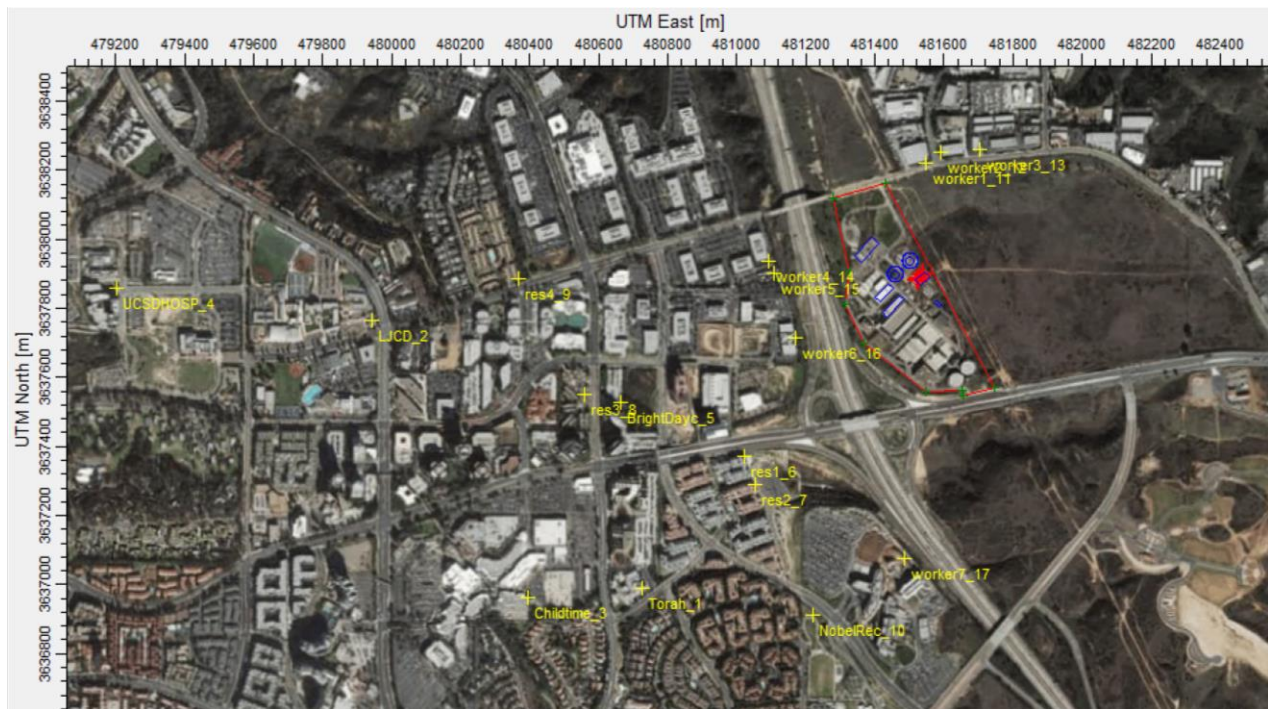


Table 3-2: Operational Source Modeling Characteristics

Stack IDs	Description	Stack Height (m)	Stack Diameter (m)	Stack Flowrate (m/s)	Stack Temp (°K)	UTM x (m)	UTM y (m)
STCK1	LFG ICE	16.764	0.914	17.17	809.26	481,518	3,637,882
STCK2	LFG ICE	16.764	0.914	17.17	809.26	481,523	3,637,886
STCK3	LFG ICE	16.764	0.914	17.17	809.26	481,527	3,637,890
STCK4	LFG ICE	16.764	0.914	17.17	809.26	481,534	3,637,896
STCK5	LFG ICE	16.764	0.914	17.17	809.26	481,539	3,637,900

Figure 3-2: Project Boundary and Source and Building Locations in AERMOD



3.2 HRA Methodologies

The HRA followed the OEHHA and SDAPCD Tier 1 techniques to calculate the health risk impacts at all receptors, including the nearby residential, sensitive, and off-site worker receptors. The health risk calculations were performed using the HARP2 Air Dispersion and Risk Assessment Tool (ADMRT, version 17023). The X/Q values that were determined for each source using AERMOD were imported into HARP2 and used in conjunction with hourly and period (annual) emissions to determine the Ground Level Concentrations (GLCs) for each pollutant. The GLCs are then used to estimate the long-term cancer health risk to an individual and the non-cancer chronic and acute health indices.

The Point of Maximum Impact (PMI), the Maximally Exposed Individual Resident (MEIR), the Maximally Exposed Individual Worker (MEIW), and the maximum impact at a sensitive receptor were calculated for cancer risk and non-cancer chronic and acute health indices. The point of

maximum impact is a location within the modeling grid where the model calculates the highest (worst-case) health risk. The point of maximum impact may or may not be a habitable location.

A description of the health risk indices in the HARP2 output is provided below.

3.2.1 Cancer Risk

Cancer risk is the estimated probability of an exposed individual potentially contracting cancer as a result of exposure to TACs over a period of 30 years for residential receptor locations and 25 years for off-site worker receptor locations. Sensitive receptors, such as schools, hospitals, convalescent homes, and day-care centers, were evaluated the same as residences. The OEHHA Derived Method was used to calculate the cancer risk.

All receptors were assessed for a 30-year cancer risk with a “fraction of time at home” selected for the 3rd trimester through 70 years. Mandatory minimum pathways of inhalation, soil ingestion, dermal absorption, and mother’s milk were selected.

To assess the 25-year cancer risk to workers, all receptors were included in the worker run, but the results only examined the seven worker receptors. Worker pathways of inhalation, soil ingestion, and dermal absorption were selected, and no worker adjustment factor was enabled as the project may operate continuously.

3.2.2 Chronic Hazard Risk

Some TACs increase non-cancer health risk due to long-term (chronic) exposures. The Chronic Hazard Index (HIC) is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The HIC estimates for all receptor types used the OEHHA Derived Method, which uses high-end exposure parameters for inhalation and the next top two exposure pathways and mean exposure parameters for the remaining pathways for non-cancer risk estimates.

3.2.3 Acute Hazard Risk

Some TACs increase non-cancer health risk due to short-term (acute) exposures. The Acute Hazard Index (HIA) is the sum of the individual substance acute hazard indices for all TACs affecting the same target organ system. Acute risk is calculated from a 1-hour exposure.

3.2.4 Cancer Burden

Cancer burden is the estimated increase in the occurrence of cancer cases in a population subject to a cancer risk of greater than or equal to one in one million (1.0×10^{-6}) based on a 70-year exposure to TACs. The cancer burden is determined for the population located within the zone of impact, which is defined as the area within the one in one million cancer risk isopleth for a 70-year exposure. HARP2 is able to generate an isopleth, a line of a constant value, showing the area exposed to a cancer risk above one in one million. Then, the population within this area is determined. If no one lives within this area, there is no cancer burden.

Appendix C presents three HARP model summary files that outline the parameters used in the HRA, specifically the project summary that outlines the emission rates and risk exposure levels used, the 30-year residential cancer risk summary, and the 25-year worker cancer risk summary.

4.0 HRA RESULTS

Table 4-1 summarizes the HRA results. Appendix C presents a breakdown of the results by risk and pollutant. The HRA methodology provides conservative results, thus overpredicting risks. To determine if the incremental increase of TAC emissions from a project would cause a significant impact the following thresholds are applied:

- Cancer risk ≥ 10 in 1 million;
- HIC and HIA ≥ 1.0 ; and
- Cancer burden > 1 excess cancer cases (in areas where cancer risk ≥ 1 in 1 million).

Table 4-1 shows the results of the HRA at the PMI, the highest predicted cancer risk from all receptors, at the MEIR, MEIW, and maximum sensitive receptor. The cancer burden is 0 as there is no population in the area where the cancer risk is greater than 1 in a million. Table 4-1 shows that at all receptor types, the predicted health risks are less than the significance thresholds. Thus, the project's operational TAC impact would be **less than significant**.

Table 4-1: HRA Results

Impact Parameter	Receptor Type	Health Risk Impact	Significance Threshold	Significant (Yes/No)
Cancer Risk	PMI	1.16 in a million	10 in a million	No
	MEIR	0.09 in a million	10 in a million	No
	MEIW	0.02 in a million	10 in a million	No
	Maximum Sensitive Receptor	0.08 in a million	10 in a million	No
HIC	PMI	0.056	1	No
	MEIR	0.004	1	No
	MEIW	0.010	1	No
	Maximum Sensitive Receptor	0.004	1	No
HIA	PMI	0.013	1	No
	MEIR	0.002	1	No
	MEIW	0.003	1	No
	Maximum Sensitive Receptor	0.001	1	No
Cancer Burden		0	1	No

5.0 REFERENCES

California Air Resources Board (CARB), Air Quality Planning and Science Division, Oct 2015. Meteorological Files, <https://www.arb.ca.gov/toxics/harp/metfiles2.htm>, accessed February 17, 2017.

Intergovernmental Panel on Climate Change (IPCC), 2006. Guidelines for National Greenhouse Gas Inventories, <http://www.ipcc-nggip.iges.or.jp/public/2006gl/>, accessed February 17, 2017.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

San Diego County Air Pollution Control District (SDAPCD), Aug 23, 1999. E11 - ENGINE, LANDFILL GAS FIRED, http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Misc/EFT/Gas_Combustion/APCD_Engine_Landfill_Gas_Fired.pdf, accessed February 17, 2017.

San Diego Air Pollution Control District (SDAPCD), 2015. Supplemental Guidelines for Submission of Air Toxics “Hot Spots” Program Health Risk Assessments (HRAs), June 2015.

APPENDIX A – OPERATIONAL EMISSION CALCULATIONS

NCWRP IC engines - Criteria Pollutant Emissions

Caterpillar Model CG260-16 IC or equivalent ICE

Number of new engines at NCWRP

operating on 100% landfill gas

at full load each engine uses

5 with 1 backup, plus 1 installed in 2026, at which point 4 old engines will be retired

1060 scf/min landfill gas

63600 scf/hr

NCWRP IC engines on landfill gas emissions

Pollutant	Emissions per Engine						
	uncontrolled emissions (ppm)	uncontrolled emissions (lb/hr)	control efficiency	controlled emissions (ppm)	controlled emission factor (lb/mmscf)	controlled emissions (lb/hr)	controlled emissions (ton/yr)
NO _x	91.46	11.49	90%	9.146	18.066	1.149	5.03
CO	164.1	12.57	93.3%	10.995	13.242	0.842	3.69
VOC	17.28	0.758	72.5%	4.752	3.278	0.208	0.91
PM ₁₀		0.115	0%		1.808	0.115	0.50
PM _{2.5}		0.115	0%		1.808	0.115	0.50
SO _x					2.000	0.127	0.56

Pollutant	Combined Emissions for 5 Engines		
	(lb/hr)	(lb/day)	(ton/yr)
NO _x	5.75	137.9	25.2
CO	4.21	101.1	18.4
VOC	1.04	25.0	4.6
PM ₁₀	0.58	13.8	2.5
PM _{2.5}	0.58	13.8	2.5
SO _x	0.64	15.3	2.8

Reference: LFG emissions from - Technical Memorandum: Pure Water - North City Suite of Projects Power Generation Alternatives Evaluation, Dec 2015. File: TO7_Power Gen Alt Analysis_TM.PDF

Control efficiency from Oxidation/NCSR performance metrics

Sulfur emission factor based on 2014_NCWRP_Em Inventory Report.pdf

NCWRP IC engines on landfill gas TAC emissions

Engines operating on 100% landfill gas

5

At full load each engine uses

63600 scf/hr LFG

Pollutant	HARP Pollutant	CAS	TAC emission factor (lbs/mmscf LFG burned)	TAC emissions per engine (lb/hr)	TAC emissions per engine (lb/yr)	Total TAC emissions for all 5 engines (ton/yr)
Methyl chloroform (1,1,1-Trichloroethane)	1,1,1-TCA	71556	0.0033	2.10E-04	1.84E+00	4.60E-03
Acrylonitrile	Acrylonitrile	107131	0.0174	1.11E-03	9.69E+00	2.42E-02
Benzene	Benzene	71432	0.0078	4.96E-04	4.35E+00	1.09E-02
Carbon Disulfide	CS2	75150	0.0023	1.46E-04	1.28E+00	3.20E-03
Carbonyl Sulfide	CarbonylSulfide	463581	0.0015	9.54E-05	8.36E-01	2.09E-03
Chlorobenzene	Chlorobenzn	108907	0.0015	9.54E-05	8.36E-01	2.09E-03
Chloroform	Chloroform	67663	0.0002	1.27E-05	1.11E-01	2.79E-04
Ethyl Benzene	Ethyl Benzene	100414	0.0254	1.62E-03	1.42E+01	3.54E-02
Ethylene dichloride (EDC)	EDC	107062	0.0021	1.34E-04	1.17E+00	2.92E-03
Formaldehyde	Formaldehyde	50000	0.135	8.59E-03	7.52E+01	1.88E-01
Hexane	Hexane	110543	0.0294	1.87E-03	1.64E+01	4.09E-02
Hydrochloric Acid	HCl	7647010	7.43	4.73E-01	4.14E+03	1.03E+01
Hydrogen Sulfide	H2S	7783064	0.0628	3.99E-03	3.50E+01	8.75E-02
Methyl Ethyl Ketone (2-Butanone)	MEK	78933	0.0266	1.69E-03	1.48E+01	3.70E-02
Methyl Isobutyl Ketone (Hexone)	MIBK	108101	0.0097	6.17E-04	5.40E+00	1.35E-02
Methyl Chloride (Chloromethane)	Methyl Chloride	74873	0.0631	4.01E-03	3.52E+01	8.79E-02
Perchloroethylene (Tetrachloroethene)	Perc	127184	0.0321	2.04E-03	1.79E+01	4.47E-02
Toluene	Toluene	108883	0.1881	1.20E-02	1.05E+02	2.62E-01
Trichloroethylene	TCE	79016	0.0192	1.22E-03	1.07E+01	2.67E-02
Vinyl Chloride	Vinyl Chloride	75014	0.0238	1.51E-03	1.33E+01	3.31E-02
Vinylidene Chloride	Vinylid Chlorid	75354	0.001	6.36E-05	5.57E-01	1.39E-03
Xylenes (mixed)	Xylenes	1330207	0.0667	4.24E-03	3.72E+01	9.29E-02

Source: SDAPCD Emission factors for ENGINE, LANDFILL GAS FIRED

Acetone, chlorofluorocarbons, and dimethyl sulfide not include as there are no health risk factors for the substances.

NCWRP IC engines - GHG Emissions

Case 1

Engines operating on 100% landfill gas

5

At full load each engine uses

63600 scf/hr LFG

Greenhouse Gas	IPCC LFG (kg/TJ)	IPCC LFG (lb/mmscf)	Global Warming Potential	Annual GHG emissions per engine (MT/yr)	Total Annual GHG emissions for all 5 engines (MT/yr)
CO ₂	54,600	73,686	1	18,627	93,134
CH ₄	5	6.75	25	1.71	213
N ₂ O	0.1	0.13	298	0.03	51
CO ₂ e					93,398

LFG HHV heating value (Btu/scf)

581.9 from design analysis

TJ = Terra Joule = 10¹² Joules

1 Btu =

1054.2 Joule

Emission factors - 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2 stationary Combustion, commercial/institutional sources

NCWRP IC engines - GHG Emissions

Case 2

Engines operating on 100% landfill gas 2
 Engines operating on landfill gas/natural gas 3 70% LFG 30% natural gas
 At full load each engine uses 63600 scf/hr LFG
 At full load each engine uses 519449 Btu/min NG
 28802 scf/hr NG

Greenhouse Gas	IPCC LFG (kg/TJ)	IPCC LFG (lb/mmscf)	Global Warming Potential	Annual GHG emissions per 100% LFG engine (MT/yr)	Emissions for 2 100% LFG engines and 3 70% LFG engines (MT/yr)
CO ₂	54,600	73,686	1	18,627	76,370
CH ₄	5	6.75	25	1.71	6.99
N ₂ O	0.1	0.13	298	0.03	0.14
CO ₂ e					76,586

Greenhouse Gas	IPCC LFG (kg/TJ)	IPCC LFG (lb/mmscf)	Global Warming Potential	Annual GHG emissions per 30% NG engine (MT/yr)	Emissions for 3 30% NG engines (MT/yr)
CO ₂	54,100	135,774	1	10,296	30,889
CH ₄	5	13	25	0.95	2.85
N ₂ O	0.1	0.25	298	0.02	0.06
CO ₂ e					30,978

Greenhouse Gas	Total Project Emissions (MT/yr)
CO ₂	107,259
CH ₄	9.85
N ₂ O	0.20
CO ₂ e	107,564

LFG HHV heating value (Btu/scf) 581.9 from design analysis
 NG HHV heating value (Btu/scf) 1082.1 from design analysis
 TJ = Terra Joule = 10¹² Joules
 1 Btu = 1054.2 Joule

Emission factors - 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2 stationary Combustion, commercial/institutional sources

NCWRP IC engines

Caterpillar Model CG260-16 IC or equivalent ICE

Landfill Gas Stack Parameters

	Stack Height (ft)	Stack diameter (ft)	Stack exit velocity (ft/s)
Stack Temperature (F)	997	55	3 56.3

Reference: Technical Memorandum: Pure Water - North City Suite of
Projects Power Generation Alternatives Evaluation, Dec 2015. File:
TO7_Power Gen Alt Analysis_TM.PDF

Stack parameters calculated from data provided in design analysis for 100% load case

Stack Parameters used in dispersion modeling

	Stack Height (m)	Stack diameter (m)	Stack exit velocity (m/s)
Stack Temperature (K)	809.26	16.76	0.91 17.17

Stack exhaust temperature and exit velocity were the lower of either LFG or natural gas

Stack exit velocity calculations for LFG

assumed or standard data

MWs = molecular wt of stack gas	29 kg/(kg-mole)
Pressure (actual) =	1013.25 mb
Pressure (actual) =	101325 Pa = 1 atm

assume that the stack gas has the same density as air.

density of air (kg/m ³)	1.275 at 0C and 1000mb
R	8.31E+03 Pa m ³ /(K kg-mole)

Stack data

O ₂ content	6.9 %
Water vapor fraction	0.15 assumed
Ts = stack temp	997 F
	809.26 K
Stack diameter	3.00 ft
Stack diameter	0.91 m
stack exhaust Flow	39075 lb/hr

convert from mass flow to volume flow using the following equation

$$\text{Vol flow (acfm)} = \text{mass flow (lb/hr)} \times \text{kg}/2.2046\text{lb} \times \text{R Ts} / \text{MWs P} \times \text{hr}/60\text{min} \times (\text{ft}/.3048\text{m})^3$$

stack exhaust volume	23888 acfm = actual cubic feet per minute
stack exhaust volume	40585.3 m ³ /hr
Stack exit velocity	17.167 m/s

APPENDIX B – AERMOD INPUT FILE

AERMOD.INP

**

**

** AERMOD Input Produced by:
** AERMOD View Ver. 9.2.0
** Lakes Environmental Software Inc.
** Date: 2/13/2017
** File: C:\Lakes\AERMOD View\NCWRP\NCWRP.ADI

**

**

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** AERMOD Control Pathway

**

**

CO STARTING
TITLEONE NCWRP new IC engines
MODELOPT DFAULT CONC
AVERTIME 1 PERIOD
POLLUTID OTHER
RUNORNOT RUN
ERRORFIL NCWRP.err

CO FINISHED

**

** AERMOD Source Pathway

**

**

SO STARTING

** Source Location **

** Source ID - Type - X Coord. - Y Coord. **

LOCATION STCK6	POINT	481541.494	3637902.367	110.300
LOCATION STCK5	POINT	481538.601	3637899.686	110.300
LOCATION STCK4	POINT	481534.430	3637895.880	110.300
LOCATION STCK3	POINT	481526.910	3637889.540	110.300
LOCATION STCK2	POINT	481522.740	3637886.000	110.300
LOCATION STCK1	POINT	481518.390	3637882.380	110.300

** Source Parameters **

SRCPARAM STCK6	1.0	16.764	809.260	17.17000	0.914
SRCPARAM STCK5	1.0	16.764	809.260	17.17000	0.914
SRCPARAM STCK4	1.0	16.764	809.260	17.17000	0.914
SRCPARAM STCK3	1.0	16.764	809.260	17.17000	0.914

AERMOD.INP

SRCPARAM STCK2	1.0	16.764	809.260	17.17000	0.914	
SRCPARAM STCK1	1.0	16.764	809.260	17.17000	0.914	

** Building Downwash **

BUILDHGT STCK6	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK6	7.62	7.62	7.62	7.62	10.67	10.67
BUILDHGT STCK6	10.67	10.67	10.67	10.67	7.62	7.62
BUILDHGT STCK6	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK6	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK6	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK5	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK5	7.62	7.62	7.62	7.62	10.67	10.67
BUILDHGT STCK5	10.67	10.67	10.67	10.67	7.62	7.62
BUILDHGT STCK5	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK5	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK5	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK4	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK4	7.62	7.62	7.62	7.62	7.62	10.67
BUILDHGT STCK4	10.67	10.67	10.67	10.67	10.67	7.62
BUILDHGT STCK4	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK4	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK4	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK3	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK3	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK3	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT STCK3	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK3	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK3	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK2	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK2	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK2	10.67	10.67	10.67	10.67	10.67	10.67
BUILDHGT STCK2	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK2	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK2	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK1	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK1	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK1	7.62	10.67	10.67	10.67	10.67	10.67
BUILDHGT STCK1	10.67	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK1	7.62	7.62	7.62	7.62	7.62	7.62
BUILDHGT STCK1	7.62	7.62	7.62	7.62	7.62	7.62

AERMOD.INP

BUILDWID	STCK6	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK6	30.76	35.05	38.27	40.33	42.96	44.16
BUILDWID	STCK6	45.55	45.55	44.16	42.96	43.39	42.11
BUILDWID	STCK6	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK6	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK6	39.10	39.38	42.01	43.36	43.39	42.11
BUILDWID	STCK5	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK5	30.76	35.05	38.27	40.33	42.96	44.16
BUILDWID	STCK5	45.55	45.55	44.16	42.96	43.39	42.11
BUILDWID	STCK5	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK5	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK5	39.10	39.38	42.01	43.36	43.39	42.11
BUILDWID	STCK4	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK4	30.76	35.05	38.27	40.33	41.17	44.16
BUILDWID	STCK4	45.55	45.55	44.16	42.96	45.03	42.11
BUILDWID	STCK4	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK4	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK4	39.10	39.38	42.01	43.36	43.39	42.11
BUILDWID	STCK3	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK3	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK3	45.55	45.55	44.16	42.96	45.03	45.72
BUILDWID	STCK3	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK3	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK3	39.10	39.38	42.01	43.36	43.39	42.11
BUILDWID	STCK2	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK2	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK2	45.55	45.55	44.16	42.96	45.03	45.72
BUILDWID	STCK2	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK2	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK2	39.10	39.38	42.01	43.36	43.39	42.11
BUILDWID	STCK1	39.55	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK1	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK1	39.10	45.55	44.16	42.96	45.03	45.72
BUILDWID	STCK1	45.03	35.78	30.93	25.14	19.53	25.53
BUILDWID	STCK1	30.76	35.05	38.27	40.33	41.17	40.75
BUILDWID	STCK1	39.10	39.38	42.01	43.36	43.39	42.11
BUILDLN	STCK6	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK6	43.36	43.39	42.11	39.55	42.96	44.16
BUILDLN	STCK6	45.55	45.55	44.16	42.96	35.05	38.27
BUILDLN	STCK6	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK6	43.36	43.39	42.11	39.55	35.78	30.93

		AERMOD.INP					
BUILDLN	STCK6	25.14	19.53	25.53	30.76	35.05	38.27
BUILDLN	STCK5	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK5	43.36	43.39	42.11	39.55	42.96	44.16
BUILDLN	STCK5	45.55	45.55	44.16	42.96	35.05	38.27
BUILDLN	STCK5	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK5	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK5	25.14	19.53	25.53	30.76	35.05	38.27
BUILDLN	STCK4	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK4	43.36	43.39	42.11	39.55	35.78	44.16
BUILDLN	STCK4	45.55	45.55	44.16	42.96	45.03	38.27
BUILDLN	STCK4	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK4	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK4	25.14	19.53	25.53	30.76	35.05	38.27
BUILDLN	STCK3	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK3	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK3	45.55	45.55	44.16	42.96	45.03	45.72
BUILDLN	STCK3	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK3	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK3	25.14	19.53	25.53	30.76	35.05	38.27
BUILDLN	STCK2	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK2	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK2	45.55	45.55	44.16	42.96	45.03	45.72
BUILDLN	STCK2	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK2	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK2	25.14	19.53	25.53	30.76	35.05	38.27
BUILDLN	STCK1	40.33	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK1	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK1	25.14	45.55	44.16	42.96	45.03	45.72
BUILDLN	STCK1	45.03	41.17	40.75	39.10	39.38	42.01
BUILDLN	STCK1	43.36	43.39	42.11	39.55	35.78	30.93
BUILDLN	STCK1	25.14	19.53	25.53	30.76	35.05	38.27
XBADJ	STCK6	-37.23	-37.55	-36.73	-34.80	-33.35	-32.65
XBADJ	STCK6	-30.95	-28.31	-24.81	-20.56	-70.87	-74.21
XBADJ	STCK6	-76.06	-75.59	-72.82	-68.60	-1.82	-2.50
XBADJ	STCK6	-3.11	-3.62	-4.02	-4.30	-6.03	-9.36
XBADJ	STCK6	-12.41	-15.09	-17.30	-18.99	-20.10	-20.60
XBADJ	STCK6	-20.48	-20.00	-25.22	-29.68	-33.23	-35.77
XBADJ	STCK5	-34.08	-34.04	-32.97	-30.89	-29.42	-28.80
XBADJ	STCK5	-27.32	-25.00	-21.92	-18.18	-69.07	-73.05
XBADJ	STCK5	-75.57	-75.78	-73.70	-70.13	-3.96	-5.18
XBADJ	STCK5	-6.25	-7.12	-7.79	-8.21	-9.96	-13.21

		AERMOD.INP					
XBADJ	STCK5	-16.04	-18.40	-20.19	-21.37	-21.90	-21.77
XBADJ	STCK5	-20.97	-19.81	-24.35	-28.15	-31.09	-33.09
XBADJ	STCK4	-29.61	-29.04	-27.58	-25.29	-23.77	-23.29
XBADJ	STCK4	-22.09	-20.23	-17.75	-14.73	-11.27	-71.35
XBADJ	STCK4	-74.82	-76.02	-74.91	-72.29	-69.75	-8.99
XBADJ	STCK4	-10.72	-12.13	-13.17	-13.81	-15.61	-18.72
XBADJ	STCK4	-21.27	-23.17	-24.36	-24.81	-24.52	-23.47
XBADJ	STCK4	-21.71	-19.57	-23.13	-25.99	-28.06	-29.28
XBADJ	STCK3	-22.06	-20.51	-18.33	-15.60	-13.94	-13.60
XBADJ	STCK3	-12.86	-11.72	-10.23	-8.43	-6.37	-4.11
XBADJ	STCK3	-73.14	-76.05	-76.65	-75.67	-74.69	-71.44
XBADJ	STCK3	-18.27	-20.66	-22.42	-23.50	-25.44	-28.40
XBADJ	STCK3	-30.50	-31.67	-31.88	-31.12	-29.41	-26.81
XBADJ	STCK3	-23.40	-19.55	-21.40	-22.61	-23.12	-22.94
XBADJ	STCK2	-17.85	-15.75	-13.18	-10.21	-8.47	-8.22
XBADJ	STCK2	-7.73	-7.00	-6.06	-4.93	-3.66	-2.27
XBADJ	STCK2	-72.22	-76.08	-77.63	-77.57	-77.45	-74.98
XBADJ	STCK2	-22.48	-25.41	-27.57	-28.89	-30.91	-33.79
XBADJ	STCK2	-35.63	-36.39	-36.05	-34.61	-32.12	-28.66
XBADJ	STCK2	-24.32	-19.52	-20.42	-20.71	-20.36	-19.40
XBADJ	STCK1	-13.53	-10.86	-7.87	-4.64	-2.81	-2.65
XBADJ	STCK1	-2.40	-2.09	-1.71	-1.28	-0.81	-0.32
XBADJ	STCK1	0.19	-76.05	-78.59	-79.49	-80.26	-78.60
XBADJ	STCK1	-74.55	-30.30	-32.88	-34.46	-36.57	-39.36
XBADJ	STCK1	-40.96	-41.31	-40.40	-38.27	-34.97	-30.61
XBADJ	STCK1	-25.32	-19.54	-19.46	-18.79	-17.55	-15.78
YBADJ	STCK6	0.78	-2.21	-5.14	-7.91	-10.24	-12.46
YBADJ	STCK6	-14.30	-15.71	-16.63	-17.06	20.07	11.19
YBADJ	STCK6	1.96	-7.32	-16.38	-24.94	-6.61	-3.75
YBADJ	STCK6	-0.78	2.21	5.14	7.91	10.24	12.46
YBADJ	STCK6	14.30	15.71	16.63	17.06	16.97	16.36
YBADJ	STCK6	15.25	13.66	11.64	9.27	6.61	3.75
YBADJ	STCK5	-1.60	-4.01	-6.30	-8.40	-10.04	-11.58
YBADJ	STCK5	-12.77	-13.57	-13.95	-13.92	23.57	14.95
YBADJ	STCK5	5.88	-3.38	-12.54	-21.31	-3.30	-0.86
YBADJ	STCK5	1.60	4.01	6.30	8.40	10.04	11.58
YBADJ	STCK5	12.77	13.57	13.95	13.92	13.46	12.59
YBADJ	STCK5	11.34	9.73	7.80	5.64	3.30	0.86
YBADJ	STCK4	-5.04	-6.63	-8.01	-9.15	-9.80	-10.37
YBADJ	STCK4	-10.61	-10.54	-10.15	-9.44	-8.45	20.34
YBADJ	STCK4	11.47	2.26	-7.02	-16.08	-24.66	3.31

AERMOD.INP

YBADJ	STCK4	5.04	6.63	8.01	9.15	9.80	10.37
YBADJ	STCK4	10.61	10.54	10.14	9.44	8.45	7.21
YBADJ	STCK4	5.74	4.08	2.28	0.41	-1.47	-3.31
YBADJ	STCK3	-11.35	-11.52	-11.35	-10.83	-9.78	-8.64
YBADJ	STCK3	-7.23	-5.60	-3.80	-1.89	0.08	2.04
YBADJ	STCK3	21.16	12.10	2.66	-6.85	-16.15	-24.97
YBADJ	STCK3	11.35	11.52	11.35	10.83	9.78	8.64
YBADJ	STCK3	7.23	5.60	3.80	1.89	-0.08	-2.04
YBADJ	STCK3	-3.95	-5.75	-7.40	-8.82	-9.97	-10.83
YBADJ	STCK2	-14.84	-14.23	-13.19	-11.75	-9.75	-7.65
YBADJ	STCK2	-5.33	-2.84	-0.26	2.32	4.83	7.20
YBADJ	STCK2	26.56	17.57	8.04	-1.72	-11.43	-20.80
YBADJ	STCK2	14.84	14.23	13.19	11.75	9.75	7.65
YBADJ	STCK2	5.33	2.84	0.26	-2.32	-4.83	-7.20
YBADJ	STCK2	-9.34	-11.22	-12.78	-13.95	-14.70	-14.99
YBADJ	STCK1	-18.49	-17.08	-15.15	-12.76	-9.77	-6.69
YBADJ	STCK1	-3.41	-0.03	3.36	6.64	9.72	12.51
YBADJ	STCK1	14.91	23.23	13.62	3.61	-6.52	-16.45
YBADJ	STCK1	-25.88	17.08	15.15	12.76	9.77	6.69
YBADJ	STCK1	3.41	0.03	-3.36	-6.64	-9.72	-12.51
YBADJ	STCK1	-14.91	-16.88	-18.36	-19.28	-19.61	-19.34

SRCGROUP STCK1 STCK1
 SRCGROUP STCK2 STCK2
 SRCGROUP STCK3 STCK3
 SRCGROUP STCK4 STCK4
 SRCGROUP STCK5 STCK5
 SRCGROUP STCK6 STCK6

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

RE ELEVUNIT METERS

DISCCART	480727.25	3636988.55	96.28	122.50
DISCCART	479941.89	3637766.72	110.84	110.84
DISCCART	480393.77	3636960.77	117.54	117.54
DISCCART	479201.15	3637858.96	107.53	107.53
DISCCART	480661.99	3637527.31	106.02	128.00
DISCCART	481019.87	3637371.39	106.64	118.40
DISCCART	481054.47	3637291.13	88.38	119.00
DISCCART	480556.85	3637550.04	116.51	128.00

			AERMOD.INP		
DISCCART	480367.26	3637886.90	127.55	127.55	
DISCCART	481221.63	3636912.82	98.01	98.01	

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE 722931.SFC
 PROFFILE 722931.PFL
 SURFDATA 93107 2009
 UAIRDATA 3190 2009
 PROFBASE 145.4 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST
 RECTABLE 1 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 STCK1 1ST 1HRSTCK1.PLT 31
 PLOTFILE 1 STCK2 1ST 1HRSTCK2.PLT 32
 PLOTFILE 1 STCK3 1ST 1HRSTCK3.PLT 33
 PLOTFILE 1 STCK4 1ST 1HRSTCK4.PLT 34
 PLOTFILE 1 STCK5 1ST 1HRSTCK5.PLT 35
 PLOTFILE 1 STCK6 1ST 1HRSTCK6.PLT 36
 PLOTFILE PERIOD STCK1 PESTCK1.PLT 37
 PLOTFILE PERIOD STCK2 PESTCK2.PLT 38
 PLOTFILE PERIOD STCK3 PESTCK3.PLT 39
 PLOTFILE PERIOD STCK4 PESTCK4.PLT 40
 PLOTFILE PERIOD STCK5 PESTCK5.PLT 41
 PLOTFILE PERIOD STCK6 PESTCK6.PLT 42
 SUMMFILE NCWRP.sum

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM
 ** DESCPTN UTM: Universal Transverse Mercator
 ** DATUM World Geodetic System 1984
 ** DTMRGN Global Definition

AERMOD.INP

** UNITS m
** ZONE 11
** ZONEINX 0
**

APPENDIX C – HARP2 SUMMARY OUTPUTS

Maximum Cancer Risk by Pollutant at PMI, MEIR, MEIW, and Sensitive Receptor
NCWRP New LFG IC Engines

Pollutant CAS	Pollutant	Point of Maximum Impact (PMI)		Maximum Exposed Individual Resident (MEIR)		Maximum Exposed Individual Worker (MEIW)		Maximum Sensitive Receptor	
		receptor #	754	receptor #	8	receptor #	11	receptor #	5
		Cancer Risk	Contribution (%)	Cancer Risk	Contribution (%)	Cancer Risk	Contribution (%)	Cancer Risk	Contribution (%)
-	ALL	1.16E-06	100%	8.77E-08	100%	1.89E-08	100%	7.55E-08	100%
71556	1,1,1-TCA	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
107131	Acrylonitrile	7.04E-07	60.78%	5.33E-08	60.79%	1.15E-08	60.78%	4.59E-08	60.79%
71432	Benzene	3.15E-08	2.72%	2.39E-09	2.72%	5.14E-10	2.72%	2.06E-09	2.72%
75150	CS2	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
463581	CarbonylSulfide	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
108907	Chlorobenzn	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
67663	Chloroform	1.54E-10	0.01%	1.16E-11	0.01%	2.50E-12	0.01%	1.00E-11	0.01%
100414	Ethyl Benzene	8.94E-09	0.77%	6.77E-10	0.77%	1.46E-10	0.77%	5.83E-10	0.77%
107062	EDC	6.11E-09	0.53%	4.63E-10	0.53%	9.96E-11	0.53%	3.99E-10	0.53%
50000	Formaldehyde	1.15E-07	9.90%	8.68E-09	9.90%	1.87E-09	9.90%	7.48E-09	9.90%
110543	Hexane	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
7647010	HCl	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
7783064	H2S	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
78933	MEK	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
108101	MIBK	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
74873	Methyl Chloride	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
127184	Perc	2.73E-08	2.35%	2.06E-09	2.35%	4.44E-10	2.35%	1.78E-09	2.35%
108883	Toluene	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
79016	TCE	5.43E-09	0.47%	4.12E-10	0.47%	8.85E-11	0.47%	3.55E-10	0.47%
75014	Vinyl Chloride	2.60E-07	22.45%	1.97E-08	22.45%	4.23E-09	22.45%	1.70E-08	22.45%
75354	Vinylid Chlorid	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
1330207	Xylenes	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%

Maximum Chronic Risk by Pollutant at PMI, MEIR, MEIW, and Sensitive Receptor
NCWRP New LFG IC Engines

Pollutant CAS	Pollutant	Point of Maximum Impact (PMI)		Maximum Exposed Individual Resident (MEIR)		Maximum Exposed Individual Worker (MEIW)		Maximum Sensitive Receptor	
		receptor #	754	receptor #	8	receptor #	11	receptor #	5
		Chronic Hazard Index	Contribution (%)	Chronic Hazard Index	Contribution (%)	Chronic Hazard Index	Contribution (%)	Chronic Hazard Index	Contribution (%)
-	ALL	5.55E-02	100%	4.21E-03	100%	9.96E-03	100%	3.62E-03	100%
71556	1,1,1-TCA	2.15E-07	0.00%	1.63E-08	0.00%	3.86E-08	0.00%	1.40E-08	0.00%
107131	Acrylonitrile	2.27E-04	0.41%	1.72E-05	0.41%	4.07E-05	0.41%	1.48E-05	0.41%
71432	Benzene	1.70E-04	0.31%	1.28E-05	0.31%	3.04E-05	0.31%	1.11E-05	0.31%
75150	CS2	1.88E-07	0.00%	1.42E-08	0.00%	3.37E-08	0.00%	1.22E-08	0.00%
463581	CarbonylSulfide	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
108907	Chlorobenzn	9.78E-08	0.00%	7.41E-09	0.00%	1.76E-08	0.00%	6.38E-09	0.00%
67663	Chloroform	4.35E-08	0.00%	3.29E-09	0.00%	7.80E-09	0.00%	2.84E-09	0.00%
100414	Ethyl Benzene	8.28E-07	0.00%	6.28E-08	0.00%	1.49E-07	0.00%	5.40E-08	0.00%
107062	EDC	3.42E-07	0.00%	2.59E-08	0.00%	6.15E-08	0.00%	2.23E-08	0.00%
50000	Formaldehyde	9.78E-04	1.76%	7.41E-05	1.76%	1.76E-04	1.76%	6.38E-05	1.76%
110543	Hexane	2.74E-07	0.00%	2.08E-08	0.00%	4.92E-08	0.00%	1.79E-08	0.00%
7647010	HCl	5.39E-02	97.01%	4.08E-03	97.01%	9.66E-03	97.01%	3.51E-03	97.01%
7783064	H2S	4.10E-04	0.74%	3.10E-05	0.74%	7.35E-05	0.74%	2.67E-05	0.74%
78933	MEK	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
108101	MIBK	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
74873	Methyl Chloride	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
127184	Perc	5.98E-05	0.11%	4.53E-06	0.11%	1.07E-05	0.11%	3.90E-06	0.11%
108883	Toluene	4.09E-05	0.07%	3.10E-06	0.07%	7.34E-06	0.07%	2.67E-06	0.07%
79016	TCE	2.09E-06	0.00%	1.58E-07	0.00%	3.75E-07	0.00%	1.36E-07	0.00%
75014	Vinyl Chloride	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
75354	Vinylid Chlorid	9.32E-07	0.00%	7.06E-08	0.00%	1.67E-07	0.00%	6.08E-08	0.00%
1330207	Xylenes	6.22E-06	0.01%	4.71E-07	0.01%	1.12E-06	0.01%	4.05E-07	0.01%

Maximum Acute Risk by Pollutant at PMI, MEIR, MEIW, and Sensitive Receptor
NCWRP New LFG IC Engines

Pollutant CAS	Pollutant	Point of Maximum Impact (PMI)		Maximum Exposed Individual Resident (MEIR)		Maximum Exposed Individual Worker (MEIW)		Maximum Sensitive Receptor	
		receptor #	1468	receptor #	6	receptor #	11	receptor #	5
		Acute Hazard Index	Contribution (%)	Acute Hazard Index	Contribution (%)	Acute Hazard Index	Contribution (%)	Acute Hazard Index	Contribution (%)
-	ALL	1.28E-02	100%	1.54E-03	100%	3.40E-03	100%	1.18E-03	100%
71556	1,1,1-TCA	1.04E-07	0.00%	1.24E-08	0.00%	2.75E-08	0.00%	9.55E-09	0.00%
107131	Acrylonitrile	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
71432	Benzene	6.16E-04	4.81%	7.40E-05	4.81%	1.64E-04	4.81%	5.69E-05	4.81%
75150	CS2	7.92E-07	0.01%	9.50E-08	0.01%	2.10E-07	0.01%	7.30E-08	0.01%
463581	CarbonylSulfide	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
108907	Chlorobenzn	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
67663	Chloroform	2.84E-06	0.02%	3.41E-07	0.02%	7.55E-07	0.02%	2.63E-07	0.02%
100414	Ethyl Benzene	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
107062	EDC	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
50000	Formaldehyde	5.24E-03	40.88%	6.29E-04	40.88%	1.39E-03	40.88%	4.83E-04	40.88%
110543	Hexane	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
7647010	HCl	7.55E-03	58.92%	9.06E-04	58.92%	2.00E-03	58.92%	6.97E-04	58.92%
7783064	H2S	3.19E-03	24.90%	3.83E-04	24.90%	8.47E-04	24.90%	2.94E-04	24.90%
78933	MEK	4.37E-06	0.03%	5.24E-07	0.03%	1.16E-06	0.03%	4.03E-07	0.03%
108101	MIBK	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
74873	Methyl Chloride	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
127184	Perc	3.42E-06	0.03%	4.11E-07	0.03%	9.09E-07	0.03%	3.16E-07	0.03%
108883	Toluene	1.08E-05	0.08%	1.30E-06	0.08%	2.88E-06	0.08%	1.00E-06	0.08%
79016	TCE	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
75014	Vinyl Chloride	2.82E-07	0.00%	3.39E-08	0.00%	7.49E-08	0.00%	2.60E-08	0.00%
75354	Vinylid Chlorid	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%	0.00E+00	0.00%
1330207	Xylenes	6.47E-06	0.05%	7.76E-07	0.05%	1.72E-06	0.05%	5.97E-07	0.05%

HARP Model Summary Files

ProjectSummaryReport.txt

HARP Project Summary Report 2/13/2017 1:26:43 PM

PROJECT INFORMATION

HARP Version: 17023
 Project Name: NCWRP
 Project Output Directory: C:\HARP2\projects\NCWRP\NCWRP
 HARP Database: NA

FACILITY INFORMATION

Origin
 X (m):0
 Y (m):0
 Zone:1
 No. of Sources:0
 No. of Buildings:0

EMISSION INVENTORY

No. of Pollutants:110
 No. of Background Pollutants:0

Emissions SrcID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
1	0	0	107131	Acrylonitrile	1	9.6941664	0.00110664	1
1	0	0	71432	Benzene	1	4.3456608	0.00049608	1
1	0	0	75150	CS2	1	1.2814128	0.00014628	1
1	0	0	463581	CarbonylSulfide	1	0.835704	9.54E-05	1
1	0	0	108907	Chlorobenzn	1	0.835704	9.54E-05	1
1	0	0	67663	Chloroform	1	0.1114272	1.272E-05	1
1	0	0	100414	Ethyl Benzene	1	14.1512544	0.00161544	1
1	0	0	107062	EDC	1	1.1699856	0.00013356	1
1	0	0	50000	Formaldehyde	1	75.21336	0.008586	1
1	0	0	110543	Hexane	1	16.3797984	0.00186984	1
1	0	0	7647010	HCl	1	4139.52048	0.472548	1
1	0	0	7783064	H2S	1	34.9881408	0.00399408	1
1	0	0	78933	MEK	1	14.8198176	0.00169176	1
1	0	0	108101	MIBK	1	5.4042192	0.00061692	1
1	0	0	74873	Methyl Chloride	1	35.1552816	0.00401316	1
1	0	0	127184	Perc	1	17.8840656	0.00204156	1
1	0	0	108883	Toluene	1	104.7972816	0.01196316	1
1	0	0	79016	TCE	1	10.6970112	0.00122112	1
1	0	0	75014	Vinyl Chloride	1	13.2598368	0.00151368	1
1	0	0	75354	Vinylid Chlorid	1	0.557136	6.36E-05	1
1	0	0	1330207	Xylenes	1	37.1609712	0.00424212	1
2	0	0	71556	1,1,1-TCA	1	1.8385488	0.00020988	1
2	0	0	107131	Acrylonitrile	1	9.6941664	0.00110664	1
2	0	0	71432	Benzene	1	4.3456608	0.00049608	1
2	0	0	75150	CS2	1	1.2814128	0.00014628	1
2	0	0	463581	CarbonylSulfide	1	0.835704	9.54E-05	1
2	0	0	108907	Chlorobenzn	1	0.835704	9.54E-05	1
2	0	0	67663	Chloroform	1	0.1114272	1.272E-05	1
2	0	0	100414	Ethyl Benzene	1	14.1512544	0.00161544	1

ProjectSummaryReport.txt

2	0	0	107062	EDC	1	1.1699856	0.00013356	1
2	0	0	50000	Formaldehyde	1	75.21336	0.008586	1
2	0	0	110543	Hexane	1	16.3797984	0.00186984	1
2	0	0	7647010	HCl	1	4139.52048	0.472548	1
2	0	0	7783064	H2S	1	34.9881408	0.00399408	1
2	0	0	78933	MEK	1	14.8198176	0.00169176	1
2	0	0	108101	MIBK	1	5.4042192	0.00061692	1
2	0	0	74873	Methyl Chloride	1	35.1552816	0.00401316	1
2	0	0	127184	Perc	1	17.8840656	0.00204156	1
2	0	0	108883	Toluene	1	104.7972816	0.01196316	1
2	0	0	79016	TCE	1	10.6970112	0.00122112	1
2	0	0	75014	Vinyl Chloride	1	13.2598368	0.00151368	1
2	0	0	75354	Vinylid Chlorid	1	0.557136	6.36E-05	1
3	0	0	71556	1,1,1-TCA	1	1.8385488	0.00020988	1
3	0	0	107131	Acrylonitrile	1	9.6941664	0.00110664	1
3	0	0	71432	Benzene	1	4.3456608	0.00049608	1
3	0	0	75150	CS2	1	1.2814128	0.00014628	1
3	0	0	463581	CarbonylSulfide	1	0.835704	9.54E-05	1
3	0	0	108907	Chlorobenzn	1	0.835704	9.54E-05	1
3	0	0	67663	Chloroform	1	0.1114272	1.272E-05	1
3	0	0	100414	Ethyl Benzene	1	14.1512544	0.00161544	1
3	0	0	107062	EDC	1	1.1699856	0.00013356	1
3	0	0	50000	Formaldehyde	1	75.21336	0.008586	1
3	0	0	110543	Hexane	1	16.3797984	0.00186984	1
3	0	0	7647010	HCl	1	4139.52048	0.472548	1
3	0	0	7783064	H2S	1	34.9881408	0.00399408	1
3	0	0	78933	MEK	1	14.8198176	0.00169176	1
3	0	0	108101	MIBK	1	5.4042192	0.00061692	1
3	0	0	74873	Methyl Chloride	1	35.1552816	0.00401316	1
3	0	0	127184	Perc	1	17.8840656	0.00204156	1
3	0	0	108883	Toluene	1	104.7972816	0.01196316	1
3	0	0	79016	TCE	1	10.6970112	0.00122112	1
3	0	0	75014	Vinyl Chloride	1	13.2598368	0.00151368	1
3	0	0	75354	Vinylid Chlorid	1	0.557136	6.36E-05	1
3	0	0	1330207	Xylenes	1	37.1609712	0.00424212	1
4	0	0	71556	1,1,1-TCA	1	1.8385488	0.00020988	1
4	0	0	107131	Acrylonitrile	1	9.6941664	0.00110664	1
4	0	0	71432	Benzene	1	4.3456608	0.00049608	1
4	0	0	75150	CS2	1	1.2814128	0.00014628	1
4	0	0	463581	CarbonylSulfide	1	0.835704	9.54E-05	1

ProjectSummaryReport.txt								
4	0	0	108907	Chlorobenzn	1	0.835704	9.54E-05	1
4	0	0	67663	Chloroform	1	0.1114272	1.272E-05	1
4	0	0	100414	Ethyl Benzene	1	14.1512544	0.00161544	1
4	0	0	107062	EDC	1	1.1699856	0.00013356	1
4	0	0	50000	Formaldehyde	1	75.21336	0.008586	1
4	0	0	110543	Hexane	1	16.3797984	0.00186984	1
4	0	0	7647010	HCl	1	4139.52048	0.472548	1
4	0	0	7783064	H2S	1	34.9881408	0.00399408	1
4	0	0	78933	MEK	1	14.8198176	0.00169176	1
4	0	0	108101	MIBK	1	5.4042192	0.00061692	1
4	0	0	74873	Methyl Chloride	1	35.1552816	0.00401316	1
4	0	0	127184	Perc	1	17.8840656	0.00204156	1
4	0	0	108883	Toluene	1	104.7972816	0.01196316	1
4	0	0	79016	TCE	1	10.6970112	0.00122112	1
4	0	0	75014	Vinyl Chloride	1	13.2598368	0.00151368	1
4	0	0	75354	Vinylid Chlorid	1	0.557136	6.36E-05	1
4	0	0	1330207	Xylenes	1	37.1609712	0.00424212	1
5	0	0	71556	1,1,1-TCA	1	1.8385488	0.00020988	1
5	0	0	107131	Acrylonitrile	1	9.6941664	0.00110664	1
5	0	0	71432	Benzene	1	4.3456608	0.00049608	1
5	0	0	75150	CS2	1	1.2814128	0.00014628	1
5	0	0	463581	CarbonylSulfide	1	0.835704	9.54E-05	1
5	0	0	108907	Chlorobenzn	1	0.835704	9.54E-05	1
5	0	0	67663	Chloroform	1	0.1114272	1.272E-05	1
5	0	0	100414	Ethyl Benzene	1	14.1512544	0.00161544	1
5	0	0	107062	EDC	1	1.1699856	0.00013356	1
5	0	0	50000	Formaldehyde	1	75.21336	0.008586	1
5	0	0	110543	Hexane	1	16.3797984	0.00186984	1
5	0	0	7647010	HCl	1	4139.52048	0.472548	1
5	0	0	7783064	H2S	1	34.9881408	0.00399408	1
5	0	0	78933	MEK	1	14.8198176	0.00169176	1
5	0	0	108101	MIBK	1	5.4042192	0.00061692	1
5	0	0	74873	Methyl Chloride	1	35.1552816	0.00401316	1
5	0	0	127184	Perc	1	17.8840656	0.00204156	1
5	0	0	108883	Toluene	1	104.7972816	0.01196316	1
5	0	0	79016	TCE	1	10.6970112	0.00122112	1
5	0	0	75014	Vinyl Chloride	1	13.2598368	0.00151368	1
5	0	0	75354	Vinylid Chlorid	1	0.557136	6.36E-05	1
5	0	0	1330207	Xylenes	1	37.1609712	0.00424212	1
1	0	0	71556	1,1,1-TCA	1	1.8385488	0.00020988	1
2	0	0	1330207	Xylenes	1	37.1609712	0.00424212	1

ProjectSummaryReport.txt

Background
 PolID PolAbbrev Conc (ug/m^3) MAAF

Ground level concentration files (\glc\)

100414MAXHR.txt
 100414PER.txt
 107062MAXHR.txt
 107062PER.txt
 107131MAXHR.txt
 107131PER.txt
 108101MAXHR.txt
 108101PER.txt
 108883MAXHR.txt
 108883PER.txt
 108907MAXHR.txt
 108907PER.txt
 110543MAXHR.txt
 110543PER.txt
 127184MAXHR.txt
 127184PER.txt
 1330207MAXHR.txt
 1330207PER.txt
 463581MAXHR.txt
 463581PER.txt
 50000MAXHR.txt
 50000PER.txt
 67663MAXHR.txt
 67663PER.txt
 71432MAXHR.txt
 71432PER.txt
 71556MAXHR.txt
 71556PER.txt
 74873MAXHR.txt
 74873PER.txt
 75014MAXHR.txt
 75014PER.txt
 75150MAXHR.txt
 75150PER.txt
 75354MAXHR.txt
 75354PER.txt
 7647010MAXHR.txt
 7647010PER.txt
 7783064MAXHR.txt
 7783064PER.txt
 78933MAXHR.txt
 78933PER.txt
 79016MAXHR.txt
 79016PER.txt

POLLUTANT HEALTH INFORMATION
 Health Database: C:\HARP2\Tables\HEALTH1.mdb
 Health Table Version: HEALTH16088
 Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
107131	Acrylonitrile	1			5		
71432	Benzene	0.1		27	3		3
75150	CS2			6200	800		
463581	CarbonylSulfide						
108907	Chlorobenzn				1000		
67663	Chloroform	0.019		150	300		
100414	Ethyl Benzene	0.0087			2000		
107062	EDC	0.072			400		
50000	Formaldehyde	0.021		55	9		9
110543	Hexane				7000		
7647010	HCl			2100	9		
7783064	H2S			42	10		
78933	MEK			13000			
108101	MIBK						
74873	Methyl Chloride						
127184	Perc	0.021		20000	35		
108883	Toluene			37000	300		
79016	TCE	0.007			600		
75014	Vinyl Chloride	0.27		180000	70		
75354	Vinylid Chlorid						
1330207	Xylenes			22000	700		

71556 1,1,1-TCA

AIR DISPERSION MODELING INFORMATION

All executables were obtained from USEPA's Support Center for Regulatory Atmospheric Modeling website (<http://www.epa.gov/scram001/>)
AERMOD: 15181
AERMAP: 11103
BPIPRM: 04274
AERPLOT: 13329

METEOROLOGICAL INFORMATION

Version:
Surface File:
Profile File:
Surface Station:
Upper Station:
On-Site Station:

LIST OF AIR DISPERSION FILES

AERMOD Input File:
AERMOD Output File:
AERMOD Error File:
Plotfile list

1HRSTCK1.PLT
1HRSTCK2.PLT
1HRSTCK3.PLT
1HRSTCK4.PLT
1HRSTCK5.PLT
PESTCK1.PLT
PESTCK2.PLT
PESTCK3.PLT
PESTCK4.PLT
PESTCK5.PLT

LIST OF RISK ASSESSMENT FILES

Health risk analysis files (\hra\)

5.NCWRPGLCLList.csv
5.NCWRPHRAInput.hra
5.NCWRPPathwayRec.csv
5.NCWRPPoLDB.csv
NCWRPCancerRisk.csv
NCWRPCancerRiskSumByRec.csv
NCWRPGLCLList.csv
NCWRPHRAInput.hra
NCWRPNCAcuteRisk.csv
NCWRPNCAcuteRiskSumByRec.csv
NCWRPNChronicRisk.csv
NCWRPNChronicRiskSumByRec.csv
NCWRPOutput.txt
NCWRPPathwayRec.csv
NCWRPPoLDB.csv

Spatial averaging files (\sa\)

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: ON

16 years to 70 years: ON

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPCancerRisk.csv

Cancer risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPCancerRiskSumByRec.csv

Cancer risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCChronicRisk.csv

Chronic risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCChronicRiskSumByRec.csv

Chronic risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCChronicRiskSumByRecBySrc.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCAcuteRisk.csv

Acute risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCAcuteRiskSumByRec.csv

Acute risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRPNCAcuteRiskSumByRecBySrc.csv

HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution

3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

INHALATION

Daily breathing rate: Moderate8HR

****Worker Adjustment Factors****

Worker adjustment factors enabled: NO

****Fraction at time at home****

3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02

Soil mixing depth (m): 0.01

Dermal climate: Mixed

TIER 2 SETTINGS

Tier2 not used.

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerCancerRisk.csv

Cancer risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerCancerRiskSumByRec.csv

Cancer risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\CancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCChronicRisk.csv

Chronic risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCChronicRiskSumByRec.csv

Chronic risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCChronicRiskSumByRecBySrc.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCAcuteRisk.csv

Acute risk total by receptor saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCAcuteRiskSumByRec.csv

Acute risk total by receptor and source saved to:

C:\HARP2\projects\NCWRP\NCWRP\hra\NCWRP-workerNCAcuteRiskSumByRecBySrc.csv

HRA ran successfully

APPENDIX D

*City of San Diego Climate Action Plan
Consistency Checklist Submittal Application*



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).¹

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

Questions pertaining to the Checklist should be directed to Development Services Department at 619-446-5000.

¹ Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- ❖ The Checklist is required only for projects subject to CEQA review.²
- ❖ If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in [Chapter 11: Land Development Procedures](#) of the City's Municipal Code.
- ❖ The requirements in the Checklist will be included in the project's conditions of approval.
- ❖ The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name: 499621 / North City Project

Property Address: Various

Applicant Name/Co.: City of San Diego Public Utilities Department / Keli Balo

Contact Phone: 858.292.6423 Contact Email: KBalo@sandiego.gov

Was a consultant retained to complete this checklist? Yes No If Yes, complete the following

Consultant Name: Adam Poll Contact Phone: 805.308.8516

Company Name: Dudek Contact Email: apoll@dudek.com

Project Information

1. What is the size of the project (acres)? See supporting GHG emissions technical report.

2. Identify all applicable proposed land uses:

Residential (indicate # of single-family units): _____

Residential (indicate # of multi-family units): _____

Commercial (total square footage): _____

Industrial (total square footage): _____

Other (describe): Advanced water purification system

3. Is the project located in a Transit Priority Area? Yes No

4. Provide a brief description of the project proposed: The North City Project would use advanced water purification technology to produce 30 million gallons per day of locally controlled potable water from recycled water and provide a safe, reliable and cost-effective drinking water supply for San Diego.

There are two North City Project Alternatives: the Miramar Reservoir and the San Vicente Reservoir.

² Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.



CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
1. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations?; ³ <u>OR</u> , 2. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?; <u>OR</u> , 3. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment that would result in an increase in GHG emissions when compared to the existing designations, would the project be located in a Transit Priority Area (TPA) and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If **"Yes,"** proceed to Step 2 of the Checklist. For questions 2 and 3 above, provide estimated project emissions under both existing and proposed designation(s) for comparison. For question 3 above, complete Step 3.

If **"No,"** in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

³ This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.⁴ All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the [Greenbook](#) (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
<p>1. <i>Cool/Green Roofs.</i></p> <ul style="list-style-type: none"> • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; <u>OR</u> • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; <u>OR</u> • Would the project include a combination of the above two options? <p>Check "N/A" only if the project does not include a roof component.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. <i>Plumbing fixtures and fittings</i></p> <p>With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following:</p> <p>Residential buildings:</p> <ul style="list-style-type: none"> • Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi; • Standard dishwashers: 4.25 gallons per cycle; • Compact dishwashers: 3.5 gallons per cycle; and • Clothes washers: water factor of 6 gallons per cubic feet of drum capacity? <p>Nonresidential buildings:</p> <ul style="list-style-type: none"> • Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and • Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)? <p>Check "N/A" only if the project does not include any plumbing fixtures or fittings.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

⁴ Actions that are not subject to Step 2 would include, for example: 1) discretionary map actions that do not propose specific development, 2) permits allowing wireless communication facilities, 3) special events permits, 4) use permits that do not result in the expansion or enlargement of a building, and 5) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

Step 2: CAP Strategies Consistency

Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 2: Clean & Renewable Energy			
<p>3. <i>Energy Performance Standard / Renewable Energy</i></p> <p>Is the project designed to have an energy budget that meets the following performance standards when compared to the Title 24, Part 6 Energy Budget for the Proposed Design Building as calculated by Compliance Software certified by the California Energy Commission (percent improvement over current code):</p> <ul style="list-style-type: none"> • Low-rise residential – 15% improvement? • Nonresidential with indoor lighting OR mechanical systems, but not both – 5% improvement? • Nonresidential with both indoor lighting AND mechanical systems – 10% improvement?⁵ <p>The demand reduction may be provided through on-site renewable energy generation, such as solar, or by designing the project to have an energy budget that meets the above-mentioned performance standards, when compared to the Title 24, Part 6 Energy Budget for the Proposed Design Building (percent improvement over current code).</p> <p>Note: For Energy Budget calculations, high-rise residential and hotel/motel buildings are considered non-residential buildings.</p> <p>Check “N/A” only if the project does not contain any residential or non-residential buildings.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strategy 3: Bicycling, Walking, Transit & Land Use			
<p>4. <i>Electric Vehicle Charging</i></p> <ul style="list-style-type: none"> • <u>Single-family projects</u>: Would the required parking serving each new single-family residence and each unit of a duplex be constructed with a listed cabinet, box or enclosure connected to a raceway linking the required parking space to the electrical service, to allow for the future installation of electric vehicle supply equipment to provide an electric vehicle charging station for use by the resident? • <u>Multiple-family projects of 10 dwelling units or less</u>: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents? • <u>Multiple-family projects of more than 10 dwelling units</u>: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁵ CALGreen defines mechanical systems as equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Step 2: CAP Strategies Consistency

Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
<ul style="list-style-type: none"> Non-residential projects: If the project includes new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A, would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official? Of the total listed cabinets, boxes or enclosures provided, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use? <p>Check "N/A" only if the project is does not include new commercial, industrial, or other uses with the building or land area, capacity, or numbers of employees listed in Attachment A.</p>			

Strategy 3: Bicycling, Walking, Transit & Land Use

(Complete this section if project includes non-residential or mixed uses)

5. Bicycle Parking Spaces

Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code ([Chapter 14, Article 2, Division 5](#))?⁶

Check "N/A" only if the project is a residential project.

6. Shower facilities

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the [California Green Building Standards Code](#) as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	1 shower stall	4
Over 200	1 shower stall plus 1 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

⁶ Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

Step 2: CAP Strategies Consistency

Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A																		
<p>7. Designated Parking Spaces</p> <p>If the project includes an employment use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th style="padding: 5px;">Number of Required Parking Spaces</th> <th style="padding: 5px;">Number of Designated Parking Spaces</th> </tr> </thead> <tbody> <tr><td style="padding: 5px;">0-9</td><td style="padding: 5px;">0</td></tr> <tr><td style="padding: 5px;">10-25</td><td style="padding: 5px;">2</td></tr> <tr><td style="padding: 5px;">26-50</td><td style="padding: 5px;">4</td></tr> <tr><td style="padding: 5px;">51-75</td><td style="padding: 5px;">6</td></tr> <tr><td style="padding: 5px;">76-100</td><td style="padding: 5px;">9</td></tr> <tr><td style="padding: 5px;">101-150</td><td style="padding: 5px;">11</td></tr> <tr><td style="padding: 5px;">151-200</td><td style="padding: 5px;">18</td></tr> <tr><td style="padding: 5px;">201 and over</td><td style="padding: 5px;">At least 10% of total</td></tr> </tbody> </table> <p>This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.</p> <p>Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.</p> <p>Check "N/A" only if the project is a residential project, or if it does not include an employment use in a TPA.</p>	Number of Required Parking Spaces	Number of Designated Parking Spaces	0-9	0	10-25	2	26-50	4	51-75	6	76-100	9	101-150	11	151-200	18	201 and over	At least 10% of total	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Number of Required Parking Spaces	Number of Designated Parking Spaces																				
0-9	0																				
10-25	2																				
26-50	4																				
51-75	6																				
76-100	9																				
101-150	11																				
151-200	18																				
201 and over	At least 10% of total																				
<p>8. Transportation Demand Management Program</p> <p>If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes:</p> <p>At least one of the following components:</p> <ul style="list-style-type: none"> Parking cash out program Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development <p>And at least three of the following components:</p> <ul style="list-style-type: none"> Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees On-site carsharing vehicle(s) or bikesharing Flexible or alternative work hours Telework program Transit, carpool, and vanpool subsidies 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																		

Step 2: CAP Strategies Consistency

Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
<ul style="list-style-type: none"> • Pre-tax deduction for transit or vanpool fares and bicycle commute costs • Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use? <p>Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees).</p>			

Step 3: Project CAP Conformance Evaluation (if applicable)

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option 3. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment that would result in an increase in GHG emissions when compared to the existing designations, is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. The following questions must each be answered in the affirmative and fully explained.

1. Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?

Considerations for this question:

- Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
- Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
- Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Considerations for this question:

- Does the proposed project support/incorporate identified transit routes and stops/stations?
- Does the project include transit priority measures?

3. Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Considerations for this question:

- Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
- Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

- Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
- Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

- Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
- Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
- Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?

Considerations for this question:

- Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
- Does the proposed project include policies or strategies for preserving existing trees?
- Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST

ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Plan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan				
Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code.

CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here.

Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.

Table 2 Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Fixture Type	Maximum Flow Rate
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 [rim space(in.)/20 gpm @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Urinals	0.5 gallons/flush

Source: Adapted from the [California Green Building Standards Code \(CALGreen\)](#) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the [California Plumbing Code](#) for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:

gpm = gallons per minute

psi = pounds per square inch (unit of pressure)

in. = inch

Table 3 Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Appliance/Fixture Type	Standard	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the <i>California Code of Regulations</i> .	
Conveyor-type Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.62 maximum gallons per rack (4.4 L) (Chemical)
Door-type Dishwashers	0.95 maximum gallons per rack (3.6 L) (High-Temperature)	1.16 maximum gallons per rack (2.6 L) (Chemical)
Undercounter-type Dishwashers	0.90 maximum gallons per rack (3.4 L) (High-Temperature)	0.98 maximum gallons per rack (3.7 L) (Chemical)
Combination Ovens	Consume no more than 10 gallons per hour (38 L/h) in the full operational mode.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and <ul style="list-style-type: none"> • Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate. • Be equipped with an integral automatic shutoff. • Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less. 	

Source: Adapted from the [California Green Building Standards Code](#) (CALGreen) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the [California Plumbing Code](#) for definitions of each appliance/fixture type.

Acronyms:

L = liter

L/h = liters per hour

L/s = liters per second

psi = pounds per square inch (unit of pressure)

kPa = kilopascal (unit of pressure)

Table 4 **Size-based Trigger Levels for Electric Vehicle Charging Requirements for Non-Residential Buildings related to Question 10: Electric Vehicle Charging supporting Strategy 3: Bicycling, Walking, Transit & Land Use of the Climate Action Plan**

Land Use Type	Size-based Trigger Level
Hospital	500 or more beds OR Expansion of a 500+ bed hospital by 20%
College	3,000 or more students OR Expansion of a 3,000+ student college by 20%
Hotels/Motels	500 or more rooms
Industrial, Manufacturing or Processing Plants or Industrial Parks	1,000 or more employees OR 40 acres or more of land area OR 650,000 square feet or more of gross floor area
Office buildings or Office Parks	1,000 or more employees OR 250,000 square feet or more of gross floor area
Shopping centers or Trade Centers	1,000 or more employees OR 500,000 square feet or more of gross floor area
Sports, Entertainment or Recreation Facilities	Accommodate at least 4,000 persons per performance OR Contain 1,500 or more fixed seats
Transit Projects (including, but not limited to, transit stations and park and ride lots).	All
Source: Adapted from the Governor's Office of Planning and Research's (OPR's) Model Building Code for Plug-In Electric Vehicle Charging	