Appendix C: Air Quality Analysis for the Mission Valley Community Plan Update

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Air Quality Analysis for the Mission Valley Community Plan Update San Diego, California

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ATTACHMENT

Acronyms

ºC	degree Celsius
°F	degree Fahrenheit
$\mu g/m^3$	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model 2013.2.2
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CPU	community plan update
DPM	diesel particulate matter
GHG	greenhouse gas
I-5	Interstate 5
LOS	level of service
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
RAQS	Regional Air Quality Strategy
ROG	reactive organic gases
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
TAC	toxic air contaminant
TCM	Transportation Control Measure
USC	United States Code
VOC	volatile organic compounds
U.S. EPA	U.S. Environmental Protection Agency
ITS	Intelligent Transportation Systems
TDM	Transportation Demand Management
CCAA	California Clean Air Act
H&SC	Health & Safety Code
$\mu g/m^3$	micrograms per cubic meter

Executive Summary

This report evaluates potential local and regional air quality impacts associated with the Mission Valley Community Plan Update (CPU). The CPU would update the adopted 1984 Mission Valley Community Plan. The updated community plan will provide goals and supporting policies for future development within the CPU area, consistent with the City of San Diego (City) General Plan (General Plan), as well as a long-range, comprehensive policy framework for growth and development in the community through 2050.

The CPU encompasses a broad range of the land use designations defined in the General Plan and contains a more detailed description and distribution of land uses than the citywide General Plan.

Consistency with Regional Air Quality Plans

The CPU supports the General Plan City of Villages strategy to focus growth into mixed-use activity centers that are pedestrian-friendly, centers of community, and linked to the regional transit system. Implementation of this strategy can decrease vehicle miles traveled and reduce mobile emissions. The CPU policies, implementing actions, and design guidelines support General Plan concepts such as increased walkability, enhanced pedestrian and bicycle networks, improved connections to transit, and sustainable development and green building practices. The CPU would be consistent with the San Diego Air Pollution Control District's (SDAPCD's) regional goals of providing infill housing, improving the balance between jobs and housing, and integrating land uses near major transportation corridors.

However, because the CPU would result in greater density, future emissions associated with build-out of the CPU would be greater than future emissions associated with build-out of the adopted land uses. Therefore, emissions of ozone precursors (reactive organic gases and oxides of nitrogen) would be greater than what is accounted for in the Regional Air Quality Strategy (RAQS). Thus, the CPU would conflict with implementation of the RAQS and would have a potentially significant impact on regional air quality.

The following mitigation measure would be implemented to address the potential impacts:

AQ-1 Within six months of the certification of the Final Program Environmental Impact Report, the City shall provide a revised land use map for the CPU area to San Diego Association of Governments (SANDAG) to ensure that any revisions to the population and employment projections used by SDAPCD in updating the RAQS and the State Implementation Plan (SIP) will accurately reflect anticipated growth due to the proposed CPU.

This measure would provide SANDAG with an updated land use map to assist SANDAG in revising the housing forecasts; however, until the anticipated growth is included in the emission estimates of the RAQS and the SIP, direct and cumulative impacts relative to conformance with the RAQS would remain significant and unavoidable. It should be noted that the SDAPCD may revise an emission reduction strategy if the district demonstrates to the California Air Resources Board (CARB), and CARB finds, that the modified strategy is at least as effective in improving air quality as the strategy being replaced. The latest RAQS was updated in 2016 and only accounts for the transportation and land use plans that were in place at the time of its adoption. Thus, even with implementation of mitigation measure AQ-1, impacts related to conflicts with the applicable air quality plan would remain significant and unavoidable.

Air Quality Standards

Construction

To illustrate the range of potential construction-related air quality impacts from projects that could occur within the CPU area, two hypothetical projects were evaluated. The first hypothetical project analyzed is a 5-acre mixed-use development consisting of the demolition of a 20,000-square-foot structure and the construction of 300 multi-family residential units and 10,000 square feet of retail uses. Emissions due to construction of this hypothetical 5-acre mixed-use project would be less than the applicable thresholds for all criteria pollutants, and impacts would be less than significant.

The second hypothetical project analyzed is the demolition of the existing stadium and the redevelopment of the stadium site with 5,000 multi-family units, one million square feet of retail space, two million square feet of office space, a 50-acre park, and a 40,000-seat stadium. With the exception of stadium demolition activities, emissions due to construction of a stadium redevelopment project are anticipated to be less than the applicable thresholds for all criteria pollutants.

For a project that includes demolition of the existing stadium, implementation of mitigation measure AQ-1 would ensure the reduction of demolition emissions to a level less than significant, as was demonstrated in the Air Quality Technical Study prepared for the Stadium Reconstruction Project.

MM-AQ-2 Stadium Site Construction and Demolition. The following measures to reduce construction emissions shall be included in the specific plan for the stadium site and shall include, but not be limited to, the following:

- Equipment shall meet U.S. Environmental Protection Agency (U.S. EPA) Tier 4 emission standards.
- The construction contractor shall maintain and properly tune all construction equipment in accordance with manufacturer's specifications.
- The construction contractors shall minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485

of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

- A blasting execution plan shall be developed and approved prior to any implosion event. This blasting execution plan shall evaluate the feasibility of staged implosion to minimize dust generation and exposure.
- A public notification program shall be instituted prior to the implosion event, which includes recommendations to minimize exposure to airborne dust.
- The implosion shall be scheduled during periods of low/no wind speeds.
- A dust control plan shall be developed to identify measures and equipment necessary to minimize dust from windblown storage piles, off-site tracking of dust, debris loading, truck hauling of debris, vehicle speed limits, and to identify other dust suppression measures.
- An ambient air quality monitoring program shall be implemented proximate to the stadium to measure actual particulate matter concentrations.

Implementation of MM-AQ-2 would reduce construction-related air quality impacts for any future stadium project. However, due to the potential for significant growth in the CPU area, future development could exceed the SDAPCD screening thresholds; therefore, this impact is considered significant and unavoidable.

Operation

Pollutant emissions from build-out of all land uses within the CPU area would far exceed project-level City Significance Determination Thresholds. At the program level, the analysis looks at the emissions of the CPU in relation to the adopted Community Plan to determine if the emissions would exceed the emissions estimates included in the RAQS to determine whether it would obstruct attainment or result in an exceedance of Ambient Air Quality Standards that would result in the temporary or permanent exposure of persons to unhealthy concentrations of pollutants. As shown in this analysis, because the CPU would increase density, operational emissions associated with the proposed CPU would be greater for all pollutants when compared to the adopted Community Plan.

The regulations at the federal, state, and local levels provide a framework for developing project-level air quality protection measures for future discretionary projects. The City's process for the evaluation of discretionary projects also includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. However, it is possible that for certain discretionary projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. Ministerial projects would not be subject to further CEQA review. Because operational emissions associated with build-out of the proposed CPU would be greater for all pollutants when compared to adopted land uses and the assumptions used to develop the RAQS, and because there could be certain projects that would not be able to reduce emissions below the thresholds, this impact would be significant and unavoidable.

Sensitive Receptors

Carbon Monoxide Hot Spots

Based on the Transportation Impact Analysis prepared for the CPU, several signalized intersections were found to operate at LOS E or F during the AM or PM peak hour with build-out of the CPU (Chen Ryan 2018). However, the intersection with the greatest peak hour volume would be the Interstate 15 (I-15) northbound ramps at Friars Road with a PM peak hour volume of 7,580 vehicles. Peak hour traffic volume at all intersections would be less than the carbon monoxide (CO) hot spot screening volume of 31,600 vehicles per hour. Therefore, the CPU is not anticipated to result in a CO hot spot, and impacts would be less than significant.

Toxic Air Emissions

Construction

Construction of future projects and associated infrastructure implemented under the CPU would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Due to the highly dispersive nature of diesel particulate matter (DPM), and the fact that construction activities would occur intermittently and at various locations over the lifetime of the CPU, DPM generated by construction is not expected to expose sensitive receptors to significant toxic air emissions. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types; the DPM emissions of individual equipment would be substantially reduced over the years as build-out continues. Therefore, construction related air quality impacts would be less than significant.

Stationary Sources

Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources are regulated by the local air pollution control or management district through the issuance of permits; in this case, the agency is the SDAPCD. The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk. With existing regulatory framework, at the program level, impacts associated with stationary sources in the CPU area would be less than significant.

Mobile Sources

Interstate 8 (I-8) travels east-west through the center of the CPU area, and I-15, Interstate 805 (I-805), State Route 163 (SR-163), and Interstate 5 (I-5) travel north-south through and adjacent to the CPU area. Residential uses are currently located within 500 feet of these freeways, and future sensitive land uses could be located adjacent to these freeways. Consistent with the goals of CARB's handbook, the CPU policies, implementing actions, and design guidelines support infill, mixed-use, higher density, and transit-oriented development that would benefit regional air quality. By promoting this type of development and incorporating policies into the CPU to ensure site planning and building design minimizes exposure of sensitive receptors to mobile source emissions, implementation of the CPU is consistent with the goals of CARB and would not expose sensitive receptors to substantial pollutant concentrations. Impacts related to exposure of sensitive receptors to mobile source emissions would be less than significant.

Air Movement

The CPU area is heavily developed, and only relatively small areas would experience a change in land uses, most of which would involve the demolition of existing structures and improvements. Future development would be similar in height, bulk, and scale to existing development in the area. Implementation of the CPU would result in a similar development pattern and would not substantially change air movement within the CPU area. Impacts would be less than significant.

Odor

The CPU proposes multi-family residential, commercial/retail, office, institutional, hotel, industrial, school, and park and open space land uses. The CPU would not introduce land uses that would generate substantial odor. While specific developments within the CPU area are not known at this program level of analysis, planned land uses would not encourage or support uses that would be associated with significant odor generation. Odors associated with restaurants or other commercial uses would be similar to existing residential and food service uses throughout the CPU area. Additionally, auto body shops would be required to comply with SDAPCD Rule 51 (Public Nuisance). Odor generation is generally confined to the immediate vicinity of the source. Thus, implementation of the proposed CPU and associated discretionary actions would not create operational-related objectionable odors affecting a substantial number of people within the City. Therefore, impacts related to objectionable odors would be less than significant.

1.0 Introduction

The purpose of this report is to assess potential short- and long-term local and regional air quality impacts resulting from the Mission Valley Community Plan Update (CPU).

Population, vehicle trends, and planned land use are important considerations in both evaluating emissions of pollutants into the air by mobile and stationary sources and developing a policy framework and mitigation measures, as necessary, to address air quality impacts. Mobile sources of pollutants are gas and diesel-powered motor vehicles, construction equipment, trains, and airplanes. Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses.

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. The project site is located within the San Diego Air Basin (SDAB). The SDAB is currently classified as a federal non-attainment area for ozone, and a state non-attainment area for particulate matter less than 10 microns (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and ozone.

Air quality impacts may result from the construction and operation of projects that would occur as part of implementation and build-out under the CPU. Construction impacts are short-term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operation emissions are long-term and include mobile (i.e., traffic generated by the proposed land uses) and area sources (i.e., natural gas, fireplaces, and consumer products). Operational impacts can occur on two levels: regional impacts resulting from development or local hot-spot effects experienced by sensitive receivers close to highly congested roadways.

The analysis of impacts is based on federal and state Ambient Air Quality Standards (AAQS) and is assessed in accordance with the guidelines, policies, and standards established by the City of San Diego (City) and the San Diego Air Pollution Control District (SDAPCD). CPU compatibility with the adopted air quality plan for the area is also assessed. Measures are recommended, as required, to reduce potentially significant impacts.

2.0 Project Description

2.1 Project Location

Mission Valley is located at nearly the geographic center of the city of San Diego. The CPU area encompasses the valley formed by the San Diego River, a significant natural and recreational asset for the city. The CPU area sits at the crossroads of the regional freeway system, with access from Interstate 5 (I-5), Interstate 8 (I-8), Interstate 15 (I-15), Interstate 805 (I-805), and State Route 163 (SR-163). The CPU area is a regional center of office, hotels, and retail sales. The CPU area is also a major regional visitor center, hosting a large number of hotels in close proximity to nearby tourist attractions such as Mission Bay, Sea World, and Balboa Park.

The CPU area encompasses 3,216 acres and is generally bounded by Friars Road and the northern slopes of the valley on the north, the eastern banks of the San Diego River on the east, the southern slopes of the valley on the south, and I-5 on the west. The CPU area is surrounded by several other community planning areas: Old Town San Diego, Uptown, Greater North Park, Normal Heights, Kensington–Talmadge, College Area, Navajo, Tierrasanta, Kearny Mesa, Serra Mesa, Linda Vista, and Mission Bay Park.

Figure 1 shows the regional location of the CPU area, and Figure 2 shows an aerial photograph.

2.2 Project Background

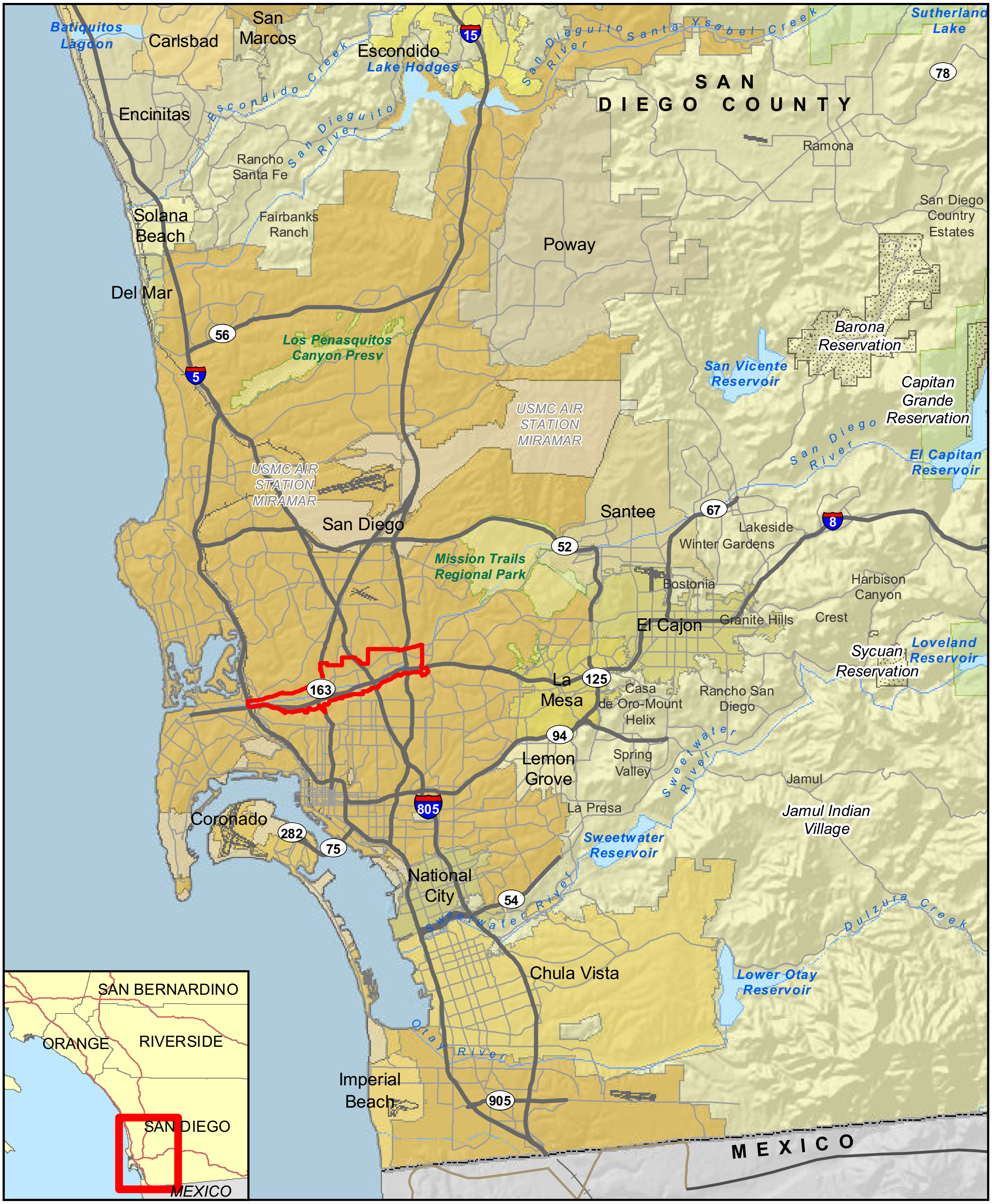
The CPU would update the adopted 1984 Mission Valley Community Plan. The CPU provides goals and supporting policies for future development within the CPU area, consistent with the General Plan, and a long-range, comprehensive policy framework for growth and development in the community through 2050.

The CPU addresses a range of topics, including Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services, and Safety; Recreation; Conservation; Noise; Historic Preservation; and Arts and Culture.

The CPU evaluates existing conditions on a community-wide level and develops the long-term vision for Mission Valley. In addition to augmenting the General Plan and providing detailed land use guidance for the Mission Valley community, the CPU would also play a role in helping to achieve statewide regulatory objectives including reducing greenhouse gas emissions; promoting public health; improving air and water quality; reducing automobile use and fuel consumption; encouraging efficient development patterns; protecting natural and agricultural resources; encouraging infill and compact development; revitalizing urban and community centers; increasing availability of affordable housing; promoting water conservation; improving the infrastructure system; and promoting energy efficiency and conservation measures.

2.3 Development Summary

The CPU encompasses a broad range of the land use designations defined in the General Plan and contains a more detailed description and distribution of land uses than the citywide General Plan. Land uses for the base year (2012), the adopted Community Plan, and the proposed CPU build-out are summarized in Table 1. Figure 3 shows the proposed CPU land uses.



Mission Valley Community Plan Boundary

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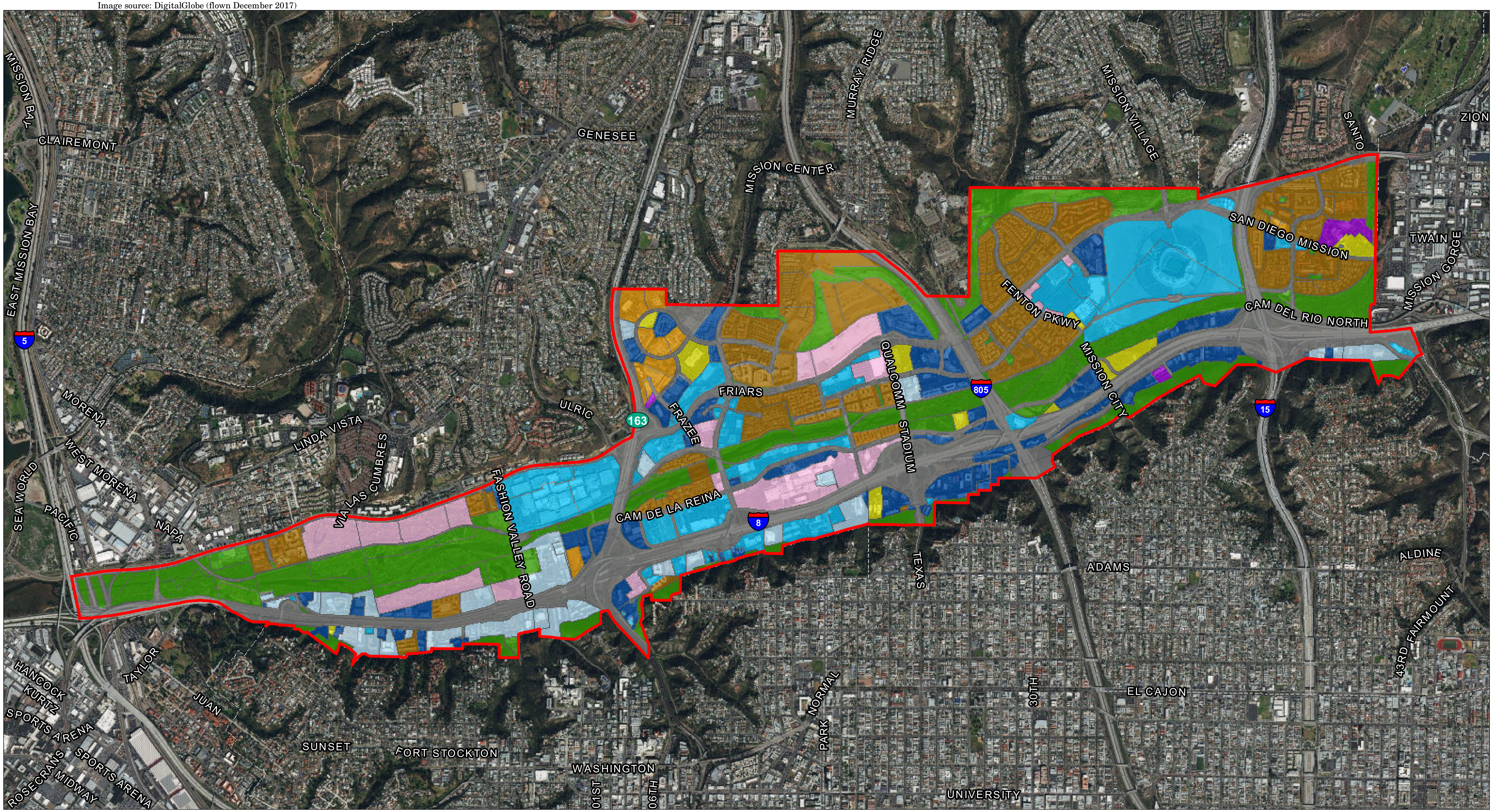
FIGURE 1
Regional Location

Image source: DigitalGlobe (flown December 2017)



Mission Valley Community Plan Boundary

Existing Planned Land Use

- Commercial
- Hotel/Motel
- Office Space
- Industrial
- Mixed Use
- Public Services and Healthcare
- Educational
- Parks and Open Space
- Residential
- Transportation, Communitcations and Utilities

0 Feet 2,000

FIGURE 2

Existing Community Plan Land Use

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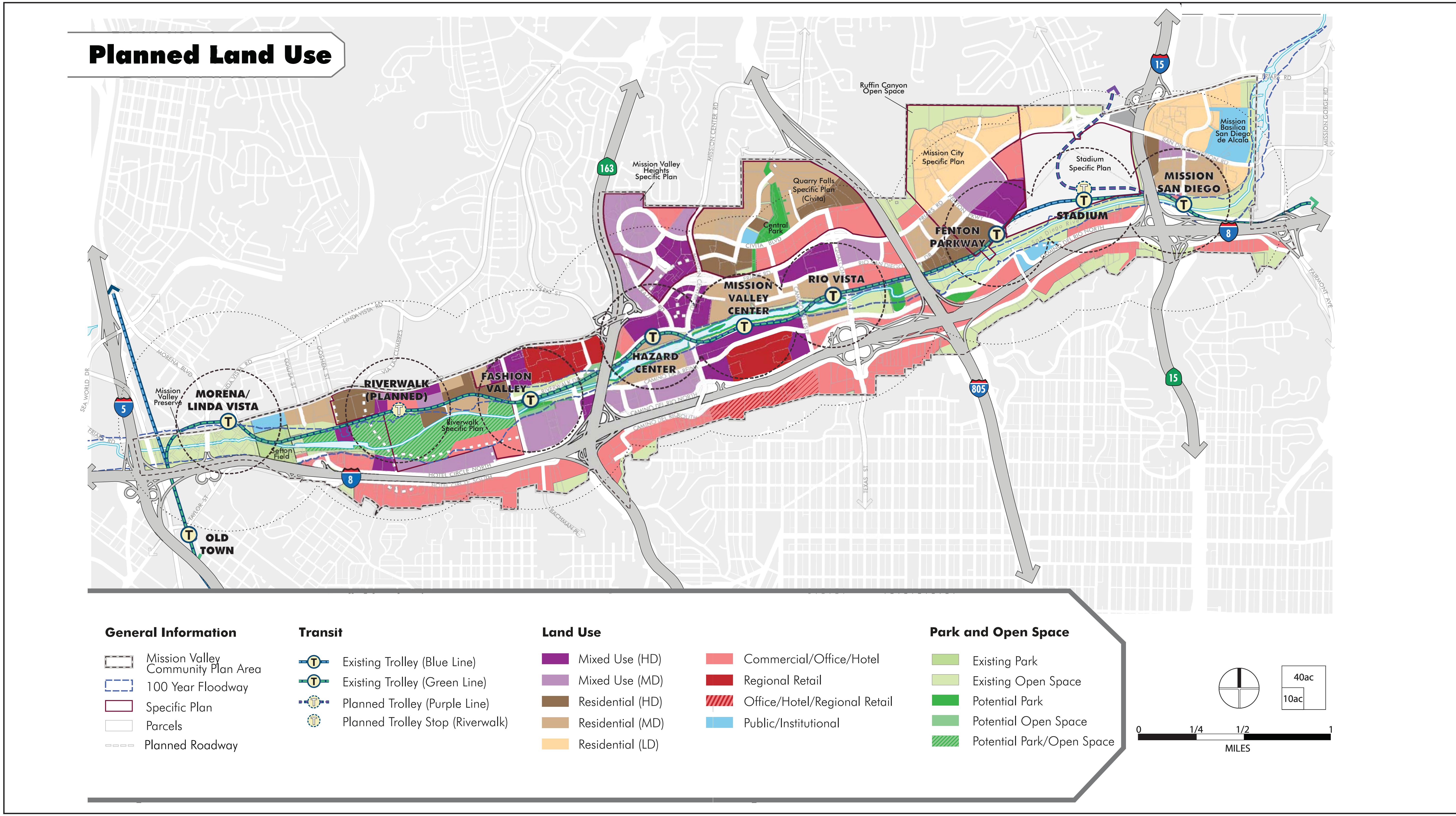


FIGURE 3
Proposed CPU Land Uses

Table 1 Existing, Adopted, and Proposed Land Uses			
Land Use	Base Year (2012)	Adopted Community Plan (2050)	Proposed Community Plan Update (2050)
Residential Development (dwelling units)			
Single-family	1	1	1
Multi-family	11,243	23,199	39,156
Total Housing	11,244	23,200	39,157
Non-Residential Development (square feet)			
Commercial/Retail	5,231,350	6,215,920	7,244,347
Office	7,418,523	11,788,498	12,087,208
Motel/Hotel	3,648,880	6,293,266	4,406,391
Industrial	603,210	529,348	120,711
Institutional/Community Facilities	158,839	175,129	195,358
Hospital/Clinic	67,223	67,223	42,803
University and Other College	247,577	223,098	189,163
Schools K to 12	96,200	96,200	105,650
Recreational	195,181	180,956	646,278
Total Non-Residential Development	17,666,983	25,569,638	25,037,909

2.4 Policies and Implementing Actions

The CPU contains policies and implementing actions to guide future development within the CPU area. The following policies are related to air quality:

Mixed Use Development

- MXU-4 In mixed-use sites adjacent to transit stops and stations, employment uses should be prioritized in areas directly adjacent to transit services to promote transit ridership.

Green Building Practices

- GBP-1 The use of sustainable building practices is highly encouraged. New buildings should strive to qualify for Leadership in Energy and Environmental Design accreditation.
- GBP-2 Building heat gain should be achieved through at least three of the following measures:
    - Orient new buildings to minimize east and west facing facades.
    - Configure buildings in such way as to create internal courtyards to trap cool air while still encouraging interaction with streets and open spaces.
    - Design deep-set fenestration on south facing facades and entries.
    - Utilize vertical shading and fins on east and west facing building facades.

- Using horizontal overhangs, awning or shade structures above south facing windows to mitigate summer sun but allow winter sun. Encourage overhang width to equal half the vertical window height to shade the window from early May to mid-August but still allowing the winter sun.
- Install high vents or open windows on the leeward side of the buildings to let the hottest air, near the ceiling, escape.
- Create low open vents or windows on the windward side that accepts cooler air to replace the hotter air.
- Include high ceiling vaults and thermal chimneys to promote rapid air changes and to serve as architectural articulation for buildings.

- GBP-3 New development should not inhibit the solar access of neighboring buildings to the maximum extent practical.

Walkability

- WLK-1 New development should designate public access easements consistent with the planned paseos identified in Figure 5 [of the CPU].
- WLK-2 New streets and pedestrian and bicycle connections should include adequate lighting for pedestrian and cyclist safety and comfort, particularly along freeway and bridge underpasses, and along the San Diego River Trail.
- WLK-3 Shade-producing street trees and street furnishing near schools and transit stops should be provided by new development.
- WLK-4 An irrevocable offer of dedication should be provided with new development to provide adequate space to accommodate a future bridge landing or pedestrian connection if located adjacent to the planned pedestrian bridges in Figure 5 [of the CPU].
- WLK-5 New development adjacent to the San Diego River should include a publicly accessible thru-block connection to provide access to the San Diego River Trail, consistent with the requirements of the San Diego River Park Master Plan.

Bicycling

- BIC-1 New development required to build 10 long-term bicycle parking spaces should provide a sheltered Bike Kitchen–a place to use tools and repair bicycles.
- BIC-2 Ensure bicycle parking is provided in a visible, well-lit area.
- BIC-3 Access plans for new development should clearly identify ingress and egress for bicycles, with minimum interaction with vehicles.

- BIC-4 New development should provide connections to bicycle trails and routes per the San Diego Regional Bicycle Plan. Open spaces should also be located to abut or provide direct access to bicycle facilities.

Transit

- TRN-1 New development should support nearby transit stations/bus stops by providing access that is visible, convenient, and comfortable to all residents and/or tenants.
- TRN-2 New development directly adjacent to transit stops should design the surrounding area to support a safe and comfortable waiting experience.

Parking

- PRK-2 New development should consider unbundled parking to offset development costs and encourage use of alternative transportation modes.
- PRK-3 New development should consider applying the Parking Standards for Transit Priority Areas once available.
- PRK-4 New development should consider designating priority electric vehicle and zero emissions vehicle parking.
- PRK-10 Bicycle parking should be located near building entrances and exits, and should be secured, weather protected, and illuminated with adequate lighting.

Streets

- STR-1 New development within Mission Valley should provide a well-connected grid of internal streets and ample provisions for pedestrian and bicycle mobility.

Intelligent Transportation Systems (ITS)

- ITS-1 New development should coordinate with the City's Transportation and Storm Water Department and Development Services Department to identify opportunities to incorporate ITS technologies as a means to improve transportation efficiency.
- ITS-2 New development should coordinate with the City's Transportation and Storm Water Department and Development Services Department to identify opportunities to incorporate ITS technologies as a means to improve transportation efficiency.

Transportation Demand Management (TDM)

- TDM-1 New development considering community circulators as a TDM measure should evaluate a coordinated effort with additional properties to expand the service and access more destinations.

- TDM-2 New development should consider developing and implementing an approved TDM Plan designed to reduce peak period automobile use and lower the minimum parking requirement. Reference San Diego Municipal Code 142.0540(c).
- TDM-3 New development should incorporate mobility hub features such as Electric Vehicle (EV) chargers, rideshare pick-up/drop-off space, bicycle parking, and transit information.
- TDM-4 New development should designate visible space along the property frontage to allow for staging of shared vehicles such as bikes and scooters.
- TDM-5 New development should consider participating in existing TDM programs, including but not limited to those overseen by the San Diego Association of Governments (SANDAG) and San Diego Metropolitan Transit System, in order to:
    - Encourage rideshare and carpool for major employers and employment centers. Promote car/vanpool matching services.
    - Continue promotion of SANDAG's guaranteed ride home for workers who carpool throughout Mission Valley.
    - Provide flexible schedules and telecommuting opportunities for employees.
- TDM-6 New development should provide flexible curb space in commercial/retail and residential areas to meet the needs of shared mobility services and the changing demands of users.
- TDM-7 New development should post information related to available transit service and bicycle infrastructure as a means to encourage use of alternative transportation modes.
- TDM-8 Employers should consider providing "parking cash out" options to employees—option for employees to receive the cash value of employer-paid parking subsidies in lieu of a parking spot—as an alternative to providing free or subsidized parking or transit passes.

Smart Cities

- SMC-1 Consider providing priority parking and charging stations (preferably solar) to promote sustainable practices and accommodate the use of Electric Vehicles (EVs), including smaller short-distance neighborhood electric vehicles.
- SMC-2 For energy efficiency and to minimize light pollution, lighting with adaptive controls should be considered for new and infill development.
- SMC-3 Developers should design, install, test, and dedicate conduit, inside wiring, and other necessary or appropriate communications infrastructure to run from a connection point in such building to the lot line adjacent to a public

right-of-way where there exists or may exist in the future a fiber optic broadband network.

Area-Specific: Transit Adjacent

- TAD-1 Buildings entrances and pedestrian paths should be designed to provide convenient access to the trolley, and, where possible, direct views of the trolley station.
- TAD-2 Active uses, such as retail, café, and restaurants, should be visible and/or easily accessible to transit users embarking or disembarking the trolley stations.
- TAD-3 Development within transit areas should incorporate pedestrian-oriented amenities such as enhanced streetscape design; parks; pocket parks; public plazas; large-canopy street trees; seating and shade structures; and water features, which shorten the perceived walking distances within transit areas.
- TAD-4 Within transit areas, sites plans should facilitate connectivity to transit stations through placement and orientation of pedestrian paths.

Area Specific: Freeway Adjacent

- FAD-1 Buildings adjacent to a freeway should be buffered from the freeway by off-street parking or ample landscaping.
- FAD-2 Freeway-adjacent buildings should be oriented such that courtyards and residential units with operable windows and balconies face away from the freeway.
- FAD-3 All residential units should be located above the freeway elevation.

In addition to these policies, the CPU contains numerous Implementing Actions related to the mobility network that support the efficient movement of pedestrians, cyclists, transit riders, motorists, and goods that would improve the transit, pedestrian, and bicycling network and encourage alternative modes of transportation, thereby reducing mobile-source emissions in the CPU area.

3.0 Regulatory Framework

"Air pollution" is a general term that refers to one or more chemical substances that degrade the quality of the atmosphere. Individual air pollutants may adversely affect human or animal health, reduce visibility, and damage our natural environment. The Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to set AAQS for six common pollutants, known as criteria pollutants. The pollutants regulated as criteria pollutants are: ozone, carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead, and particulate matter (PM_{10} and $PM_{2.5}$).

Motor vehicles are San Diego County's leading source of air pollution (SDAPCD 2016). Other mobile sources include construction equipment, trains, and airplanes. Emission standards for mobile sources are established by the California Air Resources Board (CARB) at the state level and the U.S. EPA at the federal level. Reducing mobile source emissions requires the technological improvement of existing mobile sources (e.g., retrofitting older vehicles with cleaner emission technologies) and the examination of cleaner fuels and technologies in the development of future mobile sources. The State of California has developed statewide programs to encourage cleaner cars and cleaner fuels. The regulatory framework described below details the federal and state agencies that are in charge of monitoring and controlling mobile source air pollutants and the measures currently being taken to achieve and maintain healthful air quality.

In addition to mobile sources, stationary sources also contribute to air pollution. Stationary sources are regulated by the SDAPCD and include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses.

3.1 Federal Regulations

AAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal CAA was enacted in 1970 and amended in 1977 and 1990 (42 United States Code [USC] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 USC 7409], the EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS).

Six criteria pollutants of primary concern have been designated: ozone, CO, SO_2, NO_2, lead, and PM. The primary NAAQS ". . . in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health . . . " and the secondary standards ". . . protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 USC 7409(b)(2)]. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 2 (CARB 2016).

An air basin is designated as either attainment or non-attainment for a particular pollutant; non-attainment areas may be further classified as marginal, moderate, serious, severe, or extreme non-attainment area. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Once a non-attainment area has achieved the NAAQS for a particular pollutant, it is redesignated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After redesignation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the CAA. The SDAB is a non-attainment area for the federal ozone standards.

3.2 State Regulations

3.2.1 Criteria Pollutants

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code [H&SC] Section 39000 et seq.). Under the CCAA, CARB has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS (Table 2). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 2).

Similar to the federal CAA, the state classifies as either "attainment" or "non-attainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The SDAB is a non-attainment area for the state ozone, PM_{10} , and the $PM_{2.5}$ standards.

3.2.2 State Implementation Plan

The SIP is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under the state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SIP plans for San Diego County specifically include the Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County (2012), and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide–Updated Maintenance Plan for Ten Federal Planning Areas.

3.2.3 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

Table 2
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 μg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 μg/m^3)		0.070 ppm (137 μg/m^3)		
Respirable Particulate Matter (PM$_{10}$)[9]	24 Hour	50 μg/m^3	Gravimetric or Beta Attenuation	150 μg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 μg/m^3		–		
Fine Particulate Matter (PM$_{2.5}$)[9]	24 Hour	No Separate State Standard		35 μg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 μg/m^3	Gravimetric or Beta Attenuation	12 μg/m^3	15 μg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m^3)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO$_2$)[10]	1 Hour	0.18 ppm (339 μg/m^3)	Gas Phase Chemi-luminescence	100 ppb (188 μg/m^3)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)		0.053 ppm (100 μg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO$_2$)[11]	1 Hour	0.25 ppm (655 μg/m^3)	Ultraviolet Fluorescence	75 ppb (196 μg/m^3)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 μg/m^3)	
	24 Hour	0.04 ppm (105 μg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead[12,13]	30 Day Average	1.5 μg/m^3	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 μg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 μg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 μg/m^3	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 μg/m^3)	Gas Chroma-tography			

Table 2
Ambient Air Quality Standards

NOTES:
ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; mg/m^3 = milligram per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standards of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII. Of particular concern statewide are diesel-exhaust particulate matter emissions. Diesel-exhaust particulate matter was established as a TAC in 1998, and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

Following the identification of diesel particulate matter (DPM) as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to DPM by 85 percent by 2020.

In April 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or an urban road with 100,000 or more vehicles per day should be avoided when possible. Figure 4 shows the roadways that currently carry 100,000 or more vehicles per day. As shown, only the freeways currently carry these heavy traffic volumes.

According to the studies used to support the advisory distances, the freeways used in the handbook analysis were Interstate 405 and Interstate 710, both in Los Angeles and both with volumes of over 200,000 vehicles per day along the segments studied. Actual air emissions and concentration levels are more nuanced and varied in the CPU area and depend on local factors such as traffic volumes, wind speed and direction, and meteorological conditions. Rather, the handbook recommendations are designed to fill a gap where area-specific information is not available.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of DPM and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to DPM will continue to decline.

3.2.4 The California Environmental Quality Act

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires discussion of any inconsistencies between the project and applicable general plans and regional plans, including the applicable air quality attainment or maintenance plan (or SIP).

3.3 Local Regulations

3.3.1 Regional Air Quality Strategy

The SDAPCD is the agency that regulates air quality in the SDAB. The SDAPCD prepared the Regional Air Quality Strategy (RAQS) to address state requirements, pursuant to the CCAA of 1988 (H&SC Section 39000 et seq.). The CCAA requires areas that are designated nonattainment of CAAQS for ozone, CO, SO_2, or NO_2 to prepare and implement state plans to attain the standards by the earliest practicable date (H&SC Section 40911(a)). With the exception of state ozone standards, each of these standards has been attained in the SDAB (SDAPCD 2016).

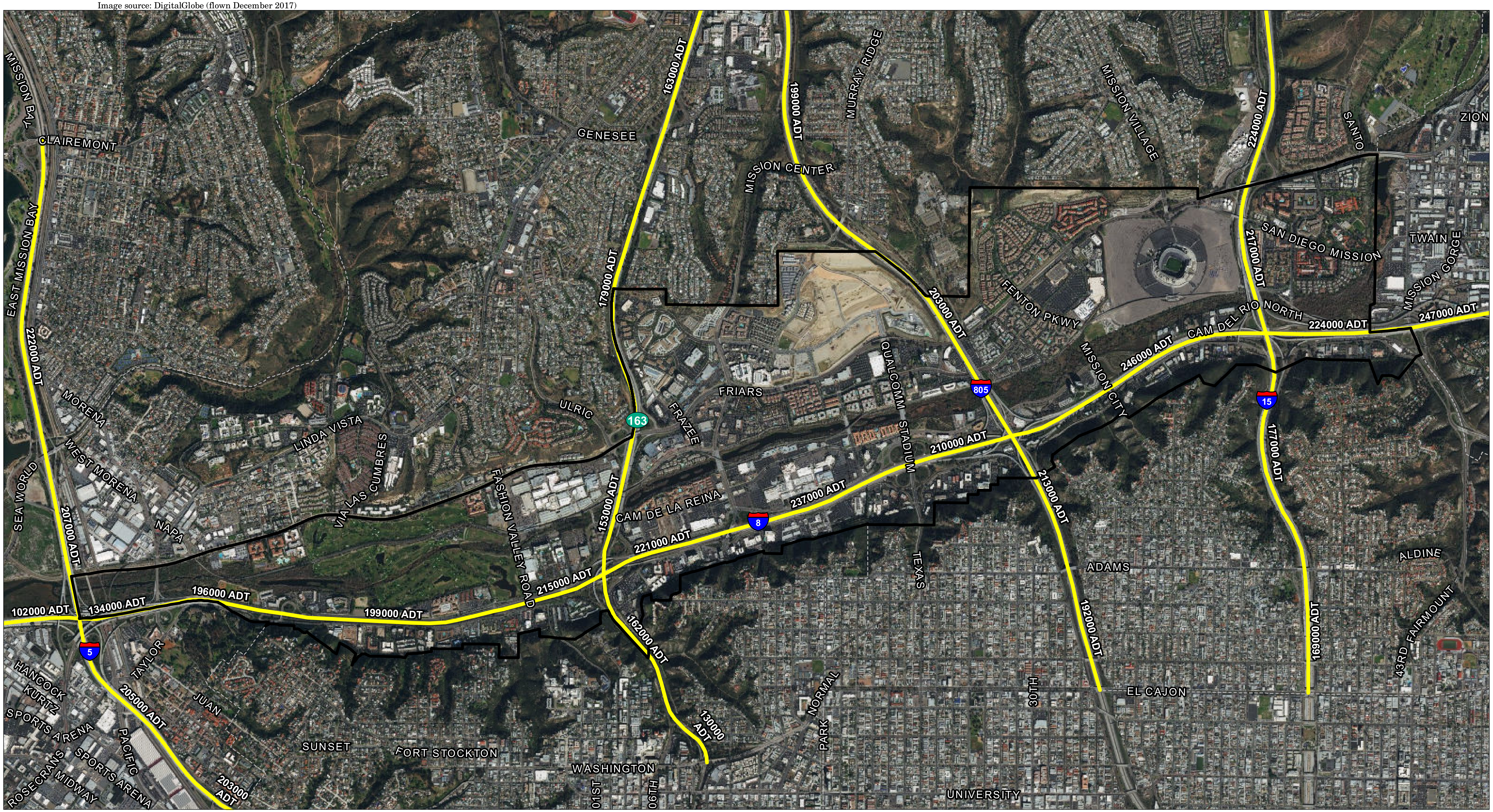
Included in the RAQS are the Transportation Control Measures (TCMs) prepared by SANDAG that control emissions from mobile sources (SDAPCD 2016). The RAQS and TCM set forth the steps needed to accomplish attainment of CAAQS for ozone. The most recent update of the RAQS and corresponding TCMs were adopted in 2016.

The SDAPCD has also established a set of rules and regulations initially adopted on January 1, 1969, and periodically reviewed and updated. These rules and regulations are available for review on the agency's website.

3.3.2 Rule 51 (Odors)

San Diego APCD Rule 51 prohibits emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. The provisions of these regulations do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a "considerable" number of persons or businesses in the area will be considered to be a significant, adverse odor impact.

Image source: DigitalGlobe (flown December 2017)



Mission Valley Community Plan Boundary

Freeway ADT

FIGURE 4

Freeways Carrying More Than 100,000 Vehicles Per Day

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Every use and operation shall be conducted so that no unreasonable heat, odor, vapor, glare, vibration (displacement), dust, smoke, or other forms of air pollution subject to SDAPCD standards shall be discernible at the property line of the parcel upon which the use or operation is located. Therefore, any unreasonable odor discernible at the property line of the project site will be considered a significant odor impact.

4.0 Environmental Setting

4.1 Geographic Setting

The CPU area is located in the SDAB between approximately three and nine miles east of the Pacific Ocean. This portion of the SDAB is subject to frequent offshore breezes. The CPU area includes a part of the San Diego River and its floodplain, and is generally bounded by Friars Road and the northern slopes of the valley on the north, the eastern banks of the San Diego River on the east, the southern slopes of the valley on the south, and I-5 on the west.

The eastern portion of the SDAB is surrounded by mountains to the north, east, and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas below.

4.2 Climate

The CPU area, like the rest of San Diego County's coastal areas, has a Mediterranean climate characterized by warm, dry summers and mild winters. The average annual precipitation is 10 inches, falling primarily from November to April. The mean annual temperature for the project area is 63 degrees Fahrenheit (°F). Winter low temperatures in the project area average about 49°F, and summer high temperatures average about 74°F. The average relative humidity is 69 percent and is based on the yearly average humidity at Lindbergh Field (Western Regional Climate Center 2015).

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range.

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersion or containment of air pollutants in the SDAB. As pollutants are carried inland by prevailing winds, they frequently become "trapped" against the mountain slopes by a temperature inversion layer as their ability to disperse diminishes. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths the greater the ability of the atmosphere to disperse pollutants.

Throughout the year, the height of the temperature inversion in the afternoon varies between approximately 1,500 and 2,500 feet above mean sea level. In winter, the morning inversion layer is about 800 feet above mean sea level. In summer, the morning inversion layer is about 1,100 feet above mean sea level. Therefore, air quality generally tends to be better in the winter than in the summer.

The prevailing westerly wind pattern is sometimes interrupted by regional “Santa Ana” conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada–Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions, or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported and locally produced contaminants produce the worst air quality measurements recorded in the basin.

4.3 Existing Air Quality

Air quality at a particular location is a function of the kinds, amounts, and dispersion rates of pollutants being emitted into the air locally and throughout the basin. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography.

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the CARB or federal standards set by the U.S. EPA. The San Diego APCD 2017 Annual Air Quality Monitoring Network Plan includes 10 air-quality monitoring stations located throughout the greater San Diego metropolitan region (SDAPCD 2018). Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The San Diego–Kearny Villa Road monitoring station located at 6125A Kearny Villa Road, approximately four miles north of the CPU area, and the San Diego–Beardsley Street monitoring station located at 1110A Beardsley Street, approximately four miles south of the CPU area are the nearest stations to the CPU area. The San Diego–Kearny Villa Road monitoring station measures ozone, NO_2, PM_{10}, and $PM_{2.5}$ and the San Diego – Beardsley Street monitoring station measures ozone, NO_2, PM_{10}, and $PM_{2.5}$. Table 3 provides a summary of measurements collected at the San Diego–Kearny Villa Road and San Diego–Beardsley Street monitoring stations for the years 2015 through 2017.

Table 3 Air Quality Measurements Recorded at the San Diego–Kearny Villa Road and San Diego–Beardsley Street Monitoring Stations			
Pollutant/Standard	2015	2016	2017
San Diego–Kearny Villa Road			
Ozone			
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	2
Days State 8-hour Standard Exceeded (0.07 ppm)	0	3	6
Days Federal 8-hour Standard Exceeded (0.07 ppm)	0	3	6
Max. 1-hr (ppm)	0.077	0.087	0.097
Max 8-hr (ppm)	0.070	0.075	0.083
Nitrogen Dioxide			
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0
Max 1-hr (ppm)	0.051	0.053	0.054
Annual Average (ppm)	0.009	0.009	0.009
Particulate Matter less than 10 microns in diameter			
Days State 24-hour Standard Exceeded (50 µg/m³)	0	0	0
Days Federal 24-hour Standard Exceeded (150 µg/m³)	0	0	0
State Max Daily (µg/m³)	37.0	35.0	47.0
State Annual Average (µg/m³)	16.7	—	17.6
Federal Max Daily (µg/m³)	39.0	36.0	46.0
Federal Annual Average (µg/m³)	17.0	17.1	17.6
Particulate Matter less than 2.5 microns in diameter			
Days Federal 24-hour Standard Exceeded (35 µg/m³)	0	0	0
Max Daily (µg/m³)	25.7	19.4	27.5
State Annual Average (µg/m³)	—	7.8	8.0
Federal Annual Average (µg/m³)	7.2	7.5	7.9
San Diego–Beardsley Street			
Ozone			
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	—
Days State 8-hour Standard Exceeded (0.07 ppm)	0	0	—
Days Federal 8-hour Standard Exceeded (0.07 ppm)	0	0	—
Max. 1-hr (ppm)	0.089	0.072	—
Max 8-hr (ppm)	0.067	0.061	—
Nitrogen Dioxide			
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0
Max 1-hr (ppm)	0.062	0.073	—
Annual Average (ppm)	0.014	—	—
Particulate Matter less than 10 microns in diameter			
Measured Days State 24-hour Standard Exceeded (50 µg/m³)	1	1	0
Estimated Days State 24-hour Standard Exceeded (50 µg/m³)	5.7	—	—
Days Federal 24-hour Standard Exceeded (150 µg/m³)	0	0	0
State Max Daily (µg/m³)	54.0	51.0	—
State Annual Average (µg/m³)	23.2	—	—
Federal Max Daily (µg/m³)	53.0	49.0	—
Federal Annual Average (µg/m³)	23.0	21.9	—
Particulate Matter less than 2.5 microns in diameter			
Days Federal 24-hour Standard Exceeded (35 µg/m³)	0	0	0
Max Daily (µg/m³)	33.4	34.4	—
State Annual Average (µg/m³)	9.3	—	—
Federal Annual Average (µg/m³)	10.2	—	—

SOURCE: CARB 2018.

ppm = parts per million; µg/m³ = micrograms per cubic meter; "—" = information not released by CARB.

* Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day.

As shown, at the Kearny Villa Road monitoring station, state and federal standards for ozone, NO_2, PM_{10}, and $PM_{2.5}$ were not exceeded during the monitoring period of 2015 through 2017.

At the Beardsley Street monitoring station, measured concentrations of $PM_{2.5}$ exceeded the state 24-hour $PM_{2.5}$ standard of 35 $\mu g/m^3$ on one day during the monitoring period of 2015 through 2017. The state and federal standards for ozone, NO_2, and PM_{10} were not exceeded during the monitoring period.

5.0 Thresholds of Significance

Thresholds used to evaluate potential impacts to air quality are based on applicable criteria in the CEQA Guidelines Appendix G and the City Significance Determination Thresholds. The CPU would have a significant air quality impact if it would (City of San Diego 2016):

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. Result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Create objectionable odors affecting a substantial number of people.
5. Result in exceeding 100 pounds per day of Particulate Matter (dust).
6. Result in substantial alteration of air movement in the area of the project.

In addition to CEQA and City thresholds of significance, the SDAPCD provides thresholds for when air quality studies are required for projects. While the SDAPCD does not provide specific numerics for determining the significance of mobile source-related impacts or for evaluating CEQA projects or projects that do not require an Air Pollution Control District permit to operate (e.g., non-stationary sources), it does specify Air Quality Impact Analysis trigger levels for new or modified stationary sources (SDAPCD Rules 20.2 and 20.3). These trigger levels are not intended to represent adverse air quality impacts, rather, if these trigger levels are exceeded by a project, the SDAPCD requires an air quality analysis to determine if a significant air quality impact would occur. While, these trigger levels do not generally apply to mobile sources or general land development projects, for comparative purposes these levels are used to evaluate the increased emissions that would be discharged to the SDAB if the CPU were approved.

The SDAPCD trigger levels are also utilized by the City in their Significance Determination Thresholds (City of San Diego 2016) as one of the considerations when determining the potential significance of air quality impacts for projects within the city. The air quality impact screening criteria used in this analysis are shown in Table 4.

Table 4 Air Quality Impact Screening Criteria			
Pollutant	Emission Rate		
	Pounds/Hour	Pounds/Day	Tons/Year
NO_X	25	250	40
SO_X	25	250	40
CO	100	550	100
PM_{10}	--	100	15
Lead	--	3.2	0.6
VOC, ROG	--	137	15
$PM_{2.5}$	--	67[a]	40

SOURCE: City of San Diego 2016.
[a] SDAPCD Resolution 16-041 was adopted on April 27, 2016. It amended Rules 20.1, 20.2, and 20.3 to include a trigger level for $PM_{2.5}$. City significance thresholds have not been updated to reflect this amendment.

6.0 Assessment Methodology

6.1 Construction Emissions

Construction-related activities are temporary, short-term sources of air emissions. Sources of construction-related air emissions include:

- Fugitive dust from grading activities;
- Construction equipment exhaust;
- Construction-related trips by workers, delivery trucks, and material-hauling trucks; and
- Construction-related power consumption.

Air pollutants generated by the construction of projects within the CPU area would vary depending upon the number of projects occurring simultaneously and the size of each individual project. The exact number and timing of all development projects that could occur under the CPU are unknown.

To illustrate the potential construction-related air quality impacts from projects that could occur throughout the CPU area, two hypothetical projects were evaluated. The first hypothetical project analyzed is a five-acre mixed-use development consisting of the demolition of a 20,000-square-foot structure and the construction of 300 multi-family residential units and 10,000 square feet of retail uses. This represents a typical project that could be constructed in the CPU area. The second hypothetical project analyzed, which represented a worst-case analysis in terms of construction emissions that could occur within the CPU area, was the redevelopment of the 233-acre stadium site with a large mixed-use project, such as a Specific Plan, consisting of 5,000 multi-family units, one million square feet of retail space, two million square feet of office space, a 50-acre park, and a 40,000-seat stadium. This project would include the demolition of the existing stadium. This project represents a worst-case scenario for construction emissions because communitywide, there would be no potential construction projects (either individual or combined) that would exceed the level of construction activity associated with redevelopment of the stadium site.

Construction emissions associated with demolition of the existing stadium were obtained from previous studies prepared for the site. All other construction emissions associated with these two hypothetical projects were calculated using California Emissions Estimator Model 2016.3.2 (CalEEMod; CAPCOA 2017). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. The model estimates mass emissions from two basic sources: construction sources and operational sources (i.e., area and mobile sources). CalEEMod can estimate the required construction equipment when project-specific information is unavailable. The estimates are based on surveys performed by the South Coast Air Quality Management District (SCAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) of typical construction projects, which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters.

As the proposed CPU does not specifically identify any specific development project, CalEEMod default estimates were used to develop the construction scenarios. Where applicable, inputs were modified to reflect local ordinances and regulations. This analysis assumes that standard dust and emission control during grading operations would be implemented to reduce potential nuisance impacts and to ensure compliance with SDAPCD Rule 55.0, Fugitive Dust Control. A volatile organic compound content of 150 grams per liter for exterior architectural coatings and 100 grams per liter for interior architectural coatings was assumed in accordance with SDAPCD Rule 67.0.1. Detailed CalEEMod modeling output files for construction activities are included in Attachment 1.

6.2 Operational Emissions

Operation emissions are long-term and include mobile and area sources. Sources of operational emissions associated with future projects developed under the proposed CPU include:

- traffic generated by the project; and,
- area source emissions from the use of natural gas, fireplaces, and consumer products.

Air pollutants generated by all land uses within the CPU area will be modeled based on average emissions from land use types. For the purposes of this analysis, it is assumed that the land use changes contained in the CPU would be fully constructed in 2050. Actual emissions would vary depending on future projects and regulations within the CPU.

The operational emissions associated with build-out of the CPU and the adopted Community Plan were quantified using CalEEMod. Regional mobile-source emissions were estimated based on CARB's Emission Factor model (EMFAC2014; CARB 2014) and the vehicle miles travelled (VMT) for the area estimated in the Transportation Impact Analysis prepared for the CPU (Chen Ryan 2018). Based on the Transportation Impact Analysis, 1,646,678 VMT are generated in the base year, build-out of the adopted Community Plan would generate 2,299,348 VMT, and build-out of the CPU would generate 2,357,299 VMT.

An area source associated with development includes natural gas used in space and water heating. Energy consumption values are based on the California Energy Commission-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies, which identify energy use by building type and climate zone. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 Building Codes. CalEEMod 2016.3.2 is based on the current 2016 Title 24 energy code (Part 6 of the Building Code). CalEEMod also provides energy consumption rates based on historic data. Energy efficiency is increased with each revision to the Title 24 energy code; thus, depending on when building permits are obtained, new buildings would meet 2016 Title 24 energy code requirements at a minimum. Energy rates in CalEEMod were adjusted to account for a mix of existing development using historic energy values and new development using 2016 Title 24 energy values.

Besides natural gas, other area sources of emissions associated with development include consumer products, architectural coatings, landscape equipment, and fireplaces. Criteria air pollutant emissions from this sector are from the use of hearths, consumer products, architectural coating, and landscaping equipment. Area source emission assumptions considered that new residential uses would be constructed with natural gas rather than wood-burning fireplaces, and architectural coatings would comply with the volatile organic compound content limits specified by SDAPCD Rule 67.0.1. All other CalEEMod defaults associated with consumer products and landscaping equipment were used. Detailed CalEEMod modeling output files for operational sources are included in Attachment 1.

6.3 Sensitive Receptors

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. Guidance for the evaluation of CO hot spots is provided in the *Transportation Project-level Carbon Monoxide Protocol* (CO protocol; University of California Davis 1997) prepared for the Environmental Program of the California Department of Transportation by the Institute of Transportation Studies, University of California Davis. As indicated by the CO Protocol, CO hot spots occur nearly exclusively at signalized intersections operating at level of service (LOS) E or F.

The SDAB is a CO maintenance area under the federal CAA. This means that SDAB was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially.

All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The SMAQMD developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed in 2010 a screening threshold, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. This analysis conservatively assesses potential CO hot spots using the lower SMAQMD screening threshold of 31,600 vehicles per hour. Additionally, Sacramento and San Diego have the same federal and state CO attainment designations and, therefore, experience similar CO concentrations; thus, these screening volumes are appropriate for evaluating CO impacts in the SDAB. This screening volume has also been utilized by the South Coast Air Quality Management District, which also has the same CO designation.

7.0 Air Quality Assessment

7.1 Consistency with Regional Air Quality Plans

As described in Section 3.0, the CCAA requires air basins that are designated nonattainment of state AAQS for criteria pollutants prepare and implement plans to attain the standards by the earliest practicable date. The two pollutants addressed in the San Diego RAQS are ROG and oxides of nitrogen (NO_X), which are precursors to the formation of ozone. Projected increases in motor vehicle usage, population, and industrial growth create challenges in controlling emissions to maintain and further improve air quality. The RAQS, in conjunction with the Transportation Control Measures, were most recently adopted in 2016 as the air quality plan for the SDAB.

The basis for the RAQS is the distribution of population in the region as projected by SANDAG. The SDAPCD refers to approved general plans to forecast, inventory, and allocate regional emissions from land use and development-related sources. These emissions budgets are used in statewide air quality attainment planning efforts. As such, projects that propose development at an intensity equal to or less than population growth projections and land use intensity are inherently consistent. Amending the adopted land uses to change development potential would not necessarily result in an inconsistency between the current air quality plans (that are based on the adopted Community Plan) and the proposed CPU. The focus of the RAQS is on emissions from the sources, not the actual land use, projects that propose development that is greater than anticipated in the growth projections warrant further analysis to determine consistency with RAQS and the SIP. Consistency with the RAQS is further evaluated by comparing emissions that would occur under build-out of the adopted Community Plan to the emissions that would occur under build-out of the proposed CPU.

The CPU would increase the number of multi-family residential units and the amount of commercial/retail, office, institutional/community facilities, and recreational uses in the

CPU area, while decreasing the amount of hotel/motel, industrial, medical office/clinic, and university uses. Overall, the CPU would increase the residential, commercial, retail development potential within the CPU area. This supports the General Plan City of Villages strategy to focus growth into mixed-use activity centers that are pedestrian-friendly, centers of community, and linked to the regional transit system. Implementation of this strategy can decrease vehicle miles traveled and reduce mobile emissions. The CPU policies, implementing actions, and design guidelines support General Plan concepts such as increased walkability, enhanced pedestrian and bicycle networks, improved connections to transit, and sustainable development and green building practices. The CPU would be consistent with the SDAPCD's regional goals of providing infill housing, improving the balance between jobs and housing, and integrating land uses near major transportation corridors.

However, because the CPU would result in greater density, future emissions associated with build-out of the CPU would be greater than future emissions associated with build-out of the adopted land uses. Additionally, the future VMT associated with build-out of the CPU would be greater than the VMT associated with build-out of the adopted Community Plan, thereby resulting in greater mobile source emissions. Therefore, emissions of ozone precursors (ROG and NO_X) would be greater than what is accounted for in the RAQS. Thus, the CPU would conflict with implementation of the RAQS and would have a potentially significant impact on regional air quality.

7.2 Air Quality Standards

Air quality impacts can result from the construction and operation of a project. Construction impacts are short-term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts can occur on two levels: regional impacts resulting from development or local effects stemming from sensitive receivers being placed close to roadways or stationary sources. In the case of the CPU, operational impacts are primarily due to emissions from mobile sources associated with the vehicular travel along the roadways.

7.2.1 Construction

Construction-related activities are temporary, short-term sources of air emissions. Sources of construction-related air emissions include:

- Fugitive dust from grading activities;
- Construction equipment exhaust;
- Construction-related trips by workers, delivery trucks, and material-hauling trucks; and
- Construction-related power consumption.

Approval of the proposed CPU would not specifically permit the construction of an individual project, and no specific development details are available at this program level of analysis. However, in order to assess the potential for future development within the CPU area to result in a significant air quality impact during construction, two hypothetical projects were evaluated that represent a typical construction emissions scenario and a worst-case construction emissions scenario that could occur within the CPU area. The information is presented to illustrate the potential scope of air impacts for projects that could be reviewed under the proposed CPU. It should be noted that air quality emissions associated with construction activities are evaluated differently from greenhouse gas (GHG) emissions (Section 4.4: Greenhouse Gas Emissions and Energy), because GHG emissions impacts are cumulative in nature. There are no localized impacts associated with GHG emissions as impacts are a phenomenon affecting the global climate. Air quality emissions, on the other hand, can create localized air quality impacts that warrant project-level evaluation based on potential construction scenarios that could occur within the CPU area.

The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. Implementation of the policies in the General Plan would reduce construction-related air quality impacts. Additionally, the regulations at the federal, state, and local level provide a framework for developing project-level air quality protection measures for future discretionary projects.

As discussed in Section 6.1, to illustrate the range of potential construction-related air quality impacts from projects that could occur under the CPU, two hypothetical projects were evaluated. The first hypothetical project analyzed is a five-acre mixed-use development consisting of the demolition of a 20,000-square-foot structure and the construction of 300 multi-family residential units and 10,000 square feet of retail uses. The results are summarized in Table 5. CalEEMod output is contained in Attachment 1.

Table 5
Construction Emissions – 5-acre Mixed-use Project

Construction Phase	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	4	40	23	0	3	2
Site Preparation	5	48	23	0	21	12
Grading	3	31	17	0	8	5
Building Construction	4	29	26	0	4	2
Paving	2	15	15	0	1	1
Architectural Coating	38	2	3	0	0	0
Maximum Daily Emissions	**38**	**48**	**26**	**0**	**21**	**12**
Significance Threshold	*137*	*250*	*550*	*250*	*100*	*67*

Note that the emissions summarized in Table 5 are the maximum emissions for each pollutant and that they may occur during different phases of construction. They would not necessarily occur simultaneously. For assessing the significance of the air quality emissions resulting during construction of the hypothetical 5-acre mixed-use project, the construction emissions were compared to the thresholds shown in Table 5. As shown, the 5-acre mixed-use project would not result in air emissions that would exceed the applicable thresholds. However, if several of these projects were to occur simultaneously, implementation of the proposed CPU could exceed the significance thresholds.

The second hypothetical project analyzed was the demolition of the existing stadium and the redevelopment of the stadium site with 5,000 multi-family units, one million square feet of retail space, two million square feet of office space, a 50-acre park, and a 40,000-seat stadium. A project of this size would likely be constructed in multiple phases.

Emissions due to demolition of the existing stadium were obtained from the Air Quality Technical Study prepared for the Stadium Reconstruction Project (AECOM 2015). The results are summarized in Table 6.

Table 6
Stadium Demolition Emissions

Demolition Phase	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Unmitigated Demolition Emissions						
Abatement	4	32	30	0	2	1
Salvage	8	81	57	0	3	3
Preparation and Implosion	53	624	387	1	128	36
Remove and Sort Debris	45	528	281	1	20	18
Unmitigated Maximum Daily Emissions	**53**	**624**	**387**	**1**	**128**	**36**
Mitigated Demolition Emissions						
Abatement	1	10	24	0	0	0
Salvage	2	25	79	0	1	0
Preparation and Implosion	18	184	468	1	50	11
Remove and Sort Debris	10	88	362	1	2	2
Mitigated Maximum Daily Emissions	**18**	**184**	**362**	**1**	**2**	**2**
Significance Threshold	*137*	*250*	*550*	*250*	*100*	*67*
SOURCE: AECOM 2015						

As shown, emissions due to stadium demolition activities would exceed the project-level significance thresholds for NO_X and PM_{10}. Emissions could be reduced to less than significant with implementation of standard air quality construction best management practices. Such measures were included in the Air Quality Technical Study prepared for the Stadium Reconstruction Project (AECOM 2015).

For a project that includes demolition of the existing stadium, implementation of mitigation measure AQ-1 would ensure the reduction of demolition emissions to a level less than significant, as was demonstrated in the Air Quality Technical Study prepared for the Stadium Reconstruction Project.

Once demolition is complete, construction emissions were modeled as occurring over five two-year phases, for a total construction period of 10 years. The maximum daily emissions that would occur during each year are summarized in Table 7. CalEEMod output is contained in Attachment 1.

Table 7 Construction Emissions–Stadium Site Mixed-Use Project						
Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2020	82	234	277	1	69	24
2021	78	212	260	1	68	21
2022	76	197	245	1	68	26
2023	73	163	230	1	67	20
2024	72	158	219	1	67	25
2025	71	153	209	1	67	19
2026	70	150	201	1	67	25
2027	69	148	194	1	67	19
2028	68	146	188	1	67	25
2029	67	145	182	1	67	19
Maximum Daily Emissions	**82**	**234**	**277**	**1**	**69**	**26**
Significance Threshold	*137*	*250*	*550*	*250*	*100*	*67*

As shown, with the exception of stadium demolition activities, construction of a stadium redevelopment project would not result in air emissions that would exceed the applicable thresholds. Because these worst-case construction emissions associated with the largest redevelopment project that could occur communitywide would be less than the project-level significance thresholds, there would be no potential construction projects that individually would exceed the project-level significance thresholds. However, if this project were to occur simultaneously with other construction projects in the CPU area, there is the potential to exceed significance thresholds.

The exact number and timing of individual development projects that could occur as a result of implementation of the proposed CPU are unknown at this time. Subsequent discretionary development projects would need to analyze specific construction-related criteria air pollutant impacts to ensure that emissions remain below the SDAPCD thresholds. However, under the proposed CPU, ministerial projects that would not be subject to CEQA would also occur. Ministerial projects are generally smaller in size than those requiring discretionary review and construction would be less intensive than the scenarios evaluated in this analysis. Nevertheless, due to the potential for significant growth in the CPU area, future development could exceed the SDAPCD screening thresholds; therefore, this impact is considered significant and unavoidable.

7.2.2 Operation

Operation emissions are long-term and include mobile and area sources. Sources of operational emissions associated with future projects developed under the proposed CPU include:

- Traffic generated by the project; and
- Area source emissions from the use of natural gas, fireplaces, and consumer products.

Air pollutants generated by all land uses within the CPU area were modeled based on average emissions from land use types. For the purposes of this analysis, it was assumed that the land use changes contained in the proposed CPU would be fully constructed in 2050. Actual emissions would vary depending on future projects and regulations within the CPU area.

Program-level air emissions would exceed the City's project-level thresholds; however, project-level standards are not appropriate for a program-level analysis, as the thresholds are conservative and intended to ensure that multiple simultaneous individual projects would not obstruct the timely attainment of the NAAQS and CAAQS. Generally, discretionary, program-level planning activities, such as general plans, community plans, specific plans, etc., are evaluated for consistency with the local air quality plan. In contrast, project-level thresholds are applied to individual project-specific approvals, such as a proposed development project. Therefore, the analysis of the proposed CPU is based on the future emissions estimates and determining whether the increased emissions are significant based on their relationship to attainment strategies derived from the adopted Community Plan.

At the program level, the analysis considers emissions from build-out of the proposed CPU in relation to the adopted Community Plan to determine if the emissions would exceed the emissions estimates included in the RAQS. If such an exceedance occurs, then the proposed CPU would obstruct attainment or result in an exceedance of the AAQS and could cause the temporary or permanent exposure of persons to unhealthy concentrations of pollutants. As such, the analysis evaluates the potential for future development within the CPU area to result in, or contribute to, a violation of any air quality standard, based on a comparison of the total change in pollutant emissions projected to result from build-out of the adopted Community Plan in the year 2050 to build-out of the proposed CPU in the year 2050, and determines whether the total change in emissions is significant.

Table 8 summarizes the estimated total maximum operational emissions for the proposed CPU by source. As shown, operational emissions associated with the proposed CPU would be greater for all pollutants when compared to the adopted Community Plan. CalEEMod and EMFAC output is contained in Attachment 1.

Table 8 Total Maximum Operational Emissions for the Community Plan Update Area								
Condition	Source	Pollutant (pounds per day)					
		ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Adopted Community Plan	Area	1,304	368	2,056	2	39	39
	Energy	25	223	172	1	17	17
	Mobile	444	601	3,282	14	261	107
	Total	1,773	1,193	5,510	18	317	163
Community Plan Update	Area	1,948	622	3,468	4	65	65
	Energy	39	353	268	2	27	27
	Mobile	494	627	3,477	14	268	110
	Total	2,481	1,601	7,213	20	360	202
	Change	*708*	*409*	*1,703*	*3*	*43*	*39*

The regulations at the federal, state, and local levels provide a framework for developing project-level air quality protection measures for future discretionary projects. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. However, it is possible that for certain projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. Ministerial projects would not be subject to further CEQA review. Because operational emissions associated with build-out of the proposed CPU would be greater for all pollutants when compared to adopted land uses and the assumptions used to develop the RAQS, and because there could be certain projects that would not be able to reduce emissions below the thresholds, this impact would be significant and unavoidable.

7.3 Sensitive Receptors

7.3.1 CO Hot Spots

As discussed in Section 6.3, CO hot spots occur nearly exclusively at signalized intersections operating at LOS E or F. Further, based on more current methodologies developed by the SMAQMD, this analysis conservatively assesses potential CO hot spots using the SMAQMD screening threshold of 31,600 vehicles per hour.

Based on the Transportation Impact Analysis prepared for the CPU, the following signalized intersections were found to operate at LOS E or F during the AM or PM peak hour with build-out of the CPU.

- I-5 Northbound Ramps/Sea World Drive/Tecolote Road–AM (LOS E)
- I-805 Southbound Ramps/Phyllis Place–PM (LOS E)
- I-805 Northbound Ramps/Phyllis Place–PM (LOS F)
- I-8 Westbound Ramps/Mission Valley Mall Driveway/Camino Del Rio North–PM (LOS E)

- Fashion Valley/Friars Road–PM (LOS E)
- Northside Drive/Friars Road–PM (LOS E)
- Mission Village Drive/Friars Road Westbound Ramps–PM (LOS F)
- Mission Village Drive/Friars Road Eastbound Ramps–AM (LOS E); PM (LOS F)
- I-15 Northbound Ramps/Friars Road–PM (LOS F)
- Mission Center Road/Camino De La Reina–PM (LOS E)
- Fairmount Avenue/Camino Del Rio North/I-8 Westbound Off-ramp–PM (LOS F)
- Qualcomm Way/Camino Del Rio North/I-8 Westbound Ramps–AM (LOS E); PM (LOS F)
- Mission Center Road/I-8 Eastbound Ramps–PM (LOS E)
- Mission Center Road/Camino Del Rio South–PM (LOS E)
- Texas Street/Camino Del Rio South–AM (LOS E)
- Texas Street/Madison Avenue–AM (LOS F)
- Fashion Valley Road/Riverwalk Drive–PM (LOS F)

Peak hour turning volumes for these intersections were obtained from the Transportation Impact Analysis and compared to the SMAQMD screening threshold of 31,600 vehicles per hour. The intersection with the greatest peak hour volume would be the I-15 northbound ramps at Friars Road with a PM peak hour volume of 7,580 vehicles. Peak hour traffic volume at all intersections would be less than 31,600 vehicles per hour. Therefore, the CPU is not anticipated to result in a CO hot spot, and impacts would be less than significant.

7.3.2 Toxic Air Emissions

Construction

Construction of future projects and associated infrastructure implemented under the Mission Valley CPU would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction would result in the generation of diesel-exhaust DPM emissions from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities and on-road diesel equipment used to bring materials to and from project sites.

Generation of DPM from construction projects typically occurs in a single area for a short period. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (Office of Environmental Health Hazard Assessment (2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were a year, the exposure would be three percent of the total exposure period used for health risk calculation.

Considering this information, the highly dispersive nature of DPM, and the fact that construction activities would occur intermittently and at various locations over the lifetime of the CPU, DPM generated by construction is not expected to create conditions where the probability is greater than 10 in 1 million of developing cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic toxic air contaminants that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types; the DPM emissions of individual equipment would be substantially reduced over the years as build-out continues. Therefore, impacts related to exposure of sensitive receptors to toxic air emissions would be less than significant.

Stationary Sources

The Mission Valley CPU includes land uses that may generate air pollutants affecting adjacent sensitive land uses. In air quality terms, individual land uses that emit air pollutants in sufficient quantities are known as stationary sources. The primary concern with stationary sources is local; however, they also contribute to air pollution in the SDAB. Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources are regulated by the local air pollution control or management district through the issuance of permits; in this case, the agency is the SDAPCD.

The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk. In accordance with AB 2588, if adverse health impacts exceeding public notification levels were identified, the facility would provide public notice. If the facility poses a potentially significant public health risk, the facility must submit a risk reduction audit and plan to demonstrate how the facility would reduce health risks. Thus, with this regulatory framework, at the program level, impacts associated with stationary sources in the CPU area would be less than significant.

Mobile Sources

In April 2005, CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). It notes that the handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

I-8 travels east-west through the center of the CPU area, and I-15, I-805, SR-163, and I-5 travel north-south through and adjacent to the CPU area. Residential uses are currently located within 500 feet of these freeways, and future sensitive land uses could be also be located adjacent to these freeways. However, CARB recommendations are advisory and should not be interpreted as defined "buffer zones." Local agencies must balance other considerations such as transportation needs, the benefits of urban infill, community economic development priorities, and other quality-of-life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk, where necessary, CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level. Additionally, measures can be incorporated into future project design that would reduce the level of exposure for future residents. The California Air Pollution Control Officers Association (CAPCOA) published a guidance document, *Health Risk Assessments for Proposed Land Use Projects*, which provides recommended measures that reduce concentrations of DPM (CAPCOA 2009). These include planting vegetation between the receptor and the freeway, constructing barriers between the receptor and the freeway, and installing newer electrostatic filters in adjacent receptor buildings. When discussing freeway adjacent areas in the Implementation section, the proposed CPU states that "air quality…should be considered in all site planning and building design on all sites adjacent to and within 500 feet of a freeway. Residential uses in particular should be buffered from impacts of the freeway by taller buildings placed between the residential uses and the freeway, as well as landscaping." The proposed CPU also contains policies for development adjacent to freeways, including policies to provide land use buffers such as off-street parking and landscaping between buildings and freeways, orienting buildings adjacent to freeways such that courtyards and residential units with operable windows and balconies face away from the freeway, and locating residential units above freeway elevations.

Consistent with the goals of CARB's handbook, the CPU's policies, implementing actions, and design guidelines support infill, mixed-use, higher density, and transit-oriented development that would benefit regional air quality. By promoting this type of development and ensuring site planning and building design minimizes exposure of sensitive receptors to mobile source emissions, particularly for land uses located within 500 feet of a freeway, implementation of the CPU would be consistent with the goals of the CARB and would not expose sensitive receptors to substantial pollutant concentrations. Impacts related to exposure of sensitive receptors to mobile source emissions would be less than significant.

7.4 Air Movement

Local topographic variation such as that caused by the height and shape of a row of buildings can influence air movement in a given location (Boston Redevelopment Authority 1986). Alterations in the built environment may increase the dispersion of air pollutants or cause stagnation that may result in a harmful concentration of air pollutants. Urban canyons are places where the street is flanked by buildings on both sides creating a canyon-like environment. Where urban canyons are oriented perpendicular to the prevailing wind patterns, the likelihood of restricted air movement and associated pollutant accumulation may increase.

The Mission Valley CPU area is heavily developed, and only relatively small areas would experience a change in land uses, most of which would involve the demolition of existing structures and improvements. Future development would be similar in height, bulk, and scale to existing development in the area. Implementation of the CPU would result in a similar development pattern and would not substantially change air movement within the CPU area. Impacts would be less than significant.

7.5 Odor

A potential odor impact can occur from two different situations: (1) the proposed plan would introduce receptors in a location where they would be affected by an existing or future planned odor source, or (2) proposed uses within the plan would generate odors that could adversely affect a substantial number of persons.

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Although the type of receptors (e.g., residential, schools, daycares, and hospitals) in question are used to ultimately determine if a project has significant odor impacts, a number of operational and environmental factors also influence the extent to which those receptors are affected by odors.

The nature of operational activities and the types of odiferous compounds they produce (e.g., odor emissions from a wastewater treatment process, rendering plant, or coffee roaster) can affect the number of complaints differently depending on the type of odor produced. For example, odiferous compounds generated by a wastewater treatment plant or landfill are more likely to be perceived more offensive to receptors than those generated by a coffee roaster or a bakery.

Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odors at receptors. Receptors located upwind from a substantial odor source may not be affected due the odors being dispersed away from the receptors.

In the context of land use planning, one of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors. The City considers prudent land-use planning as the key mechanism to avoid odor impacts. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when it reaches the receptor. Odors can be generated from a variety of source types including both construction and operational activities. Although less common, construction activities that include the operation of a substantial number of diesel-fueled construction equipment and heavy-duty trucks can generate odors from diesel exhaust emissions. A project's operations, depending on the project type, can generate a large range of odors that can be considered offensive to receptors. Examples of common land use types that typically generate significant odor impacts include, but are not limited to:

- Wastewater treatment plants,
- Sanitary landfills,
- Composting/green waste facilities
- Recycling facilities,
- Petroleum refineries,
- Chemical manufacturing plants,

- Painting/Coating operations,
- Rendering plants, and
- Food packaging plants.

Typically, it is necessary to consider more than one parameter when making a significance determination. For instance, if a project would result in a receptor and odor source being located in close proximity but the receptor would be upwind from the source, the likelihood of the receptor being exposed to objectionable odors would be lower than if it was downwind from the odor source. Also, an odor complaint history may support the determination that receptors would be exposed to objectionable odors from a specific source even if the receptor appears to have sufficient distance from the odor source. This might be the case because the source generates more intense levels of odor emissions than similar sources, or because of meteorological conditions unique to the area or season.

The Mission Valley CPU proposes multi-family residential, commercial/retail, office, institutional, hotel, industrial, school, and park and open space land uses. The CPU would not introduce land uses such as those listed above that would generate substantial odor. While specific developments within the Mission Valley CPU area are not known at this program level of analysis, planned land uses would not encourage or support uses that would be associated with significant odor generation. The proposed Mission Valley CPU applies land uses based on the developed nature of the Mission Valley CPU area that includes residential uses in close proximity to commercial areas. A typical use in the CPU area that would generate odors would be restaurants. Restaurants can create odors from cooking activities, but would not generally be considered adverse. Odors associated with restaurants or other commercial uses would be similar to existing residential and food service uses throughout the CPU area. Odor generation is generally confined to the immediate vicinity of the source. Thus, implementation of the proposed Mission Valley CPU and associated discretionary actions would not create operational-related objectionable odors affecting a substantial number of people within the City.

The area south of I-8 contains a number of automobile land uses such as car dealerships that include auto body shops. While auto body shops would be permitted, they would be required to comply with SDAPCD Rule 51 (Public Nuisance), which prohibits the discharge of air contaminants or other materials that would be a nuisance or annoyance to the public. In addition, potential odors would also be controlled and minimized through compliance with the City's "Air Contaminant Regulations" under Chapter 14, Article 2, Division 7, paragraph 142.0710 of the Municipal Code. Odors generated by new nonresidential land uses are not expected to be significant or highly objectionable. New and existing facilities are required to be in compliance with SDAPCD Rule 51 to prevent nuisance on sensitive land uses. Therefore, impacts related to objectionable odors would be less than significant.

8.0 Conclusions

8.1 Consistency with Regional Air Quality Plans

The CPU supports the General Plan City of Villages strategy to focus growth into mixed-use activity centers that are pedestrian-friendly, centers of community, and linked to the regional transit system. Implementation of this strategy can decrease vehicle miles traveled and reduce mobile emissions. The CPU policies, implementing actions, and design guidelines support General Plan concepts such as increased walkability, enhanced pedestrian and bicycle networks, improved connections to transit, and sustainable development and green building practices. The CPU would be consistent with the SDAPCD's regional goals of providing infill housing, improving the balance between jobs and housing, and integrating land uses near major transportation corridors.

However, because the CPU would result in greater density, future emissions associated with build-out of the CPU would be greater than future emissions associated with build-out of the adopted land uses. Therefore, emissions of ozone precursors (ROG and NO_X) would be greater than what is accounted for in the RAQS. Thus, the CPU would conflict with implementation of the RAQS and would have a potentially significant impact on regional air quality.

The following mitigation measure would be implemented to address the potential impacts:

AQ-1 Within six months of the certification of the Final Program Environmental Impact Report, the City shall provide a revised land use map for the CPU area to SANDAG to ensure that any revisions to the population and employment projections used by SDAPCD in updating the RAQS and the SIP will accurately reflect anticipated growth due to the proposed CPU.

This measure would provide SANDAG with an updated land use map to assist SANDAG in revising the housing forecasts; however, until the anticipated growth is included in the emission estimates of the RAQS and the SIP, direct and cumulative impacts relative to conformance with the RAQS would remain significant and unavoidable. It should be noted that the SDAPCD may revise an emission reduction strategy if the district demonstrates to CARB, and CARB finds, that the modified strategy is at least as effective in improving air quality as the strategy being replaced. The latest RAQS was updated in 2016 and only accounts for the transportation and land use plans that were in place at the time of its adoption. Thus, even with implementation of mitigation measure AQ-1, impacts related to conflicts with the applicable air quality plan would remain significant and unavoidable.

8.2 Air Quality Standards

8.2.1 Construction

It is possible that for certain discretionary projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. Ministerial projects would not be subject to further CEQA review. Because operational emissions associated with build-out of the proposed CPU would be greater for all pollutants when compared to adopted land uses and the assumptions used to develop the RAQS, and because there could be certain projects that would not be able to reduce emissions below the thresholds, this impact would be significant and unavoidable.

With regard to stadium demolition activities, the following measures to reduce construction emissions shall be included in the specific plan for the stadium site and shall include, but not be limited to, the following:

MM-AQ-2 Stadium Site Construction and Demolition. The following measures to reduce construction emissions shall be included in the specific plan for the stadium site and shall include, but not be limited to, the following:

- Equipment shall meet USEPA Tier 4 emission standards.
- The construction contractor shall maintain and properly tune all construction equipment in accordance with manufacturer's specifications.
- The construction contractors shall minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- A blasting execution plan shall be developed and approved prior to any implosion event. This blasting execution plan shall evaluate the feasibility of staged implosion to minimize dust generation and exposure.
- A public notification program shall be instituted prior to the implosion event, which includes recommendations to minimize exposure to airborne dust.
- The implosion shall be scheduled during periods of low/no wind speeds.
- A dust control plan shall be developed to identify measures and equipment necessary to minimize dust from windblown storage piles, off-site tracking of dust, debris loading, truck hauling of debris, vehicle speed limits, and to identify other dust suppression measures.

- An ambient air quality monitoring program shall be implemented proximate to the stadium to measure actual particulate matter concentrations.

Implementation of MM-AQ-2 would reduce construction-related air quality impacts for any future stadium project. However, , because operational emissions associated with build-out of the proposed CPU would be greater for all pollutants when compared to adopted land uses and the assumptions used to develop the RAQS, and because there could be certain projects that would not be able to reduce emissions below the thresholds, this impact would be significant and unavoidable.

For a project that includes demolition of the existing stadium, mitigation similar to those measures identified above would be analyzed and implemented to reduce demolition emissions to a level less than significant, as was demonstrated in the Air Quality Technical Study prepared for the Stadium Reconstruction Project

The regulations at the federal, state, and local levels provide a framework for developing project-level air quality protection measures for future discretionary projects. Ministerial projects would not require a formal environmental review. However, ministerial projects are generally smaller than those requiring discretionary review and construction would be less intensive than the scenario evaluated in this analysis. As such, construction related air quality impacts would be less than significant.

Cumulatively, in order for projects being constructed simultaneously to exceed construction emissions thresholds, the projects would have to be larger scale and in close proximity to each other. While unlikely to occur based on the fact that the CPU area is largely built out, future environmental review for these larger projects would allow for a site-specific analysis of construction-level air quality emissions to ensure projects are appropriately phased and timed to avoid such cumulative construction emissions. Thus, with implementation of the existing regulatory framework, cumulative construction emissions would be less than significant.

8.2.2 Operation

Pollutant emissions from build-out of all land uses within the CPU area would far exceed project-level City Significance Determination Thresholds. As shown in this analysis, because the CPU would increase density, operational emissions associated with the proposed CPU would be greater for all pollutants when compared to the adopted Community Plan. However, regulations at the federal, state, and local levels provide a framework for developing project-level air quality protection measures for future discretionary projects. The City's process for the evaluation of discretionary projects also includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects for consistency with the goals, policies, and recommendations of the General Plan. In general, implementation of the policies in the CPU and General Plan would preclude or reduce air quality impacts. However, it is possible that for certain projects, adherence to the regulations may not adequately protect air quality, and such projects would require additional measures to avoid or reduce significant air quality impacts. Because the CPU would conflict with implementation of the RAQS, air emissions associated with the adoption of the CPU would have a potentially significant impact on regional air quality.

While identified regulations would reduce emissions and may preclude many potential impacts, as no project-specific data is available at this time and air emissions associated with future developments within the CPU area cannot be adequately quantified, this impact would be significant.

8.3 Sensitive Receptors

8.3.1 CO Hot Spots

Based on the Transportation Impact Analysis prepared for the CPU, several signalized intersections were found to operate at LOS E or F during the AM or PM peak hour with build-out of the CPU (Chen Ryan 2018). However, the intersection with the greatest peak hour volume would be the I-15 northbound ramps at Friars Road with a PM peak hour volume of 7,580 vehicles. Peak hour traffic volume at all intersections would be less than CO hot spot screening volume of 31,600 vehicles per hour. Therefore, the CPU is not anticipated to result in a CO hot spot, and impacts would be less than significant.

8.3.2 Toxic Air Emissions

Construction

Construction of future projects and associated infrastructure implemented under the Mission Valley CPU would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Due to the highly dispersive nature of DPM, and the fact that construction activities would occur intermittently and at various locations over the lifetime of the CPU, DPM generated by construction is not expected to expose sensitive receptors to significant toxic air emissions. Additionally, with ongoing implementation of U.S. Environmental Protection Agency and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types; the DPM emissions of individual equipment would be substantially reduced over the years as build-out continues. Therefore, impacts to sensitive receptors from toxic air emissions would be less than significant.

Stationary Sources

Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources are regulated by the local air pollution control or management district through the issuance of permits; in this case, the agency is the SDAPCD. The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk. With existing regulatory framework, at the program level, impacts associated with stationary sources in the CPU area would be less than significant.

Mobile Sources

I-8 travels east-west through the center of the CPU area, and I-15, I-805, SR-163, and I-5 travel north-south through and adjacent to the CPU area. Residential uses are currently located within 500 feet of these freeways, and future sensitive land uses could also be located adjacent to these freeways. Consistent with the goals of CARB's handbook, the CPU policies, implementing actions, and design guidelines support infill, mixed-use, higher density, and transit-oriented development that would benefit regional air quality. By promoting this type of development and incorporating CAPCOA measures in to site planning and building design on uses located within 500 feet of a freeway, implementation of the CPU is consistent with the goals of CARB and would not expose sensitive receptors to substantial pollutant concentrations This impact would be less than significant.

8.4 Air Movement

The CPU area is heavily developed, and only relatively small areas would experience a change in land uses, most of which would involve the demolition of existing structures and improvements. Future development would be similar in height, bulk, and scale to existing development in the area. Implementation of the CPU would result in a similar development pattern and would not substantially change air movement within the CPU area. Impacts would be less than significant.

8.5 Odor

The CPU proposes multi-family residential, commercial/retail, office, institutional, hotel, industrial, school, and park and open space land uses. The CPU would not introduce land uses that would generate substantial odor. While specific developments within the CPU area are not known at this program level of analysis, planned land uses would not encourage or support uses that would be associated with significant odor generation. Odors associated with restaurants or other commercial uses would be similar to existing residential and food service uses throughout the CPU area. Additionally, auto body shops would be required to comply with SDAPCD Rule 51 (Public Nuisance). Odor generation is generally confined to the immediate vicinity of the source. Thus, implementation of the proposed CPU and associated discretionary actions would not create operational-related objectionable odors affecting a substantial number of people within the City. Therefore, impacts related to objectionable odors would be less than significant.

9.0 References Cited

AECOM
2015 Air Quality Technical Study – Stadium Reconstruction Project. Prepared for City of San Diego Department of Public Works. August 2015.

Boston Redevelopment Authority
1986 Air Quality at Street-Level: Strategies for Urban Design. June 1986.

California Air Pollution Control Officers Association (CAPCOA)
2009 *Health Risk Assessments for Proposed Land Use Projects*. July 2009.

2017 California Emissions Estimator Model User's Guide Version 2016.3.2. November 9.

California Air Resources Board (CARB)
2000 Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October.

2005 Air Quality and Land Use Handbook: A Community Health Perspective. California Air Resources Board. April.

2014 2014 EMission FACtors (EMFAC) model, version 1.07, update March 15, 2015.

2016 Ambient Air Quality Standards. California Air Resources Board. May 4.

2018 California Air Quality Data Statistics. California Air Resources Board Internet Site. http://www.arb.ca.gov/adam/welcome.html. Top 4 Summary and Hourly Listing. Accessed September 20, 2018.

Chen Ryan Associates
2019 Mission Valley Community Plan Update Transportation Impact Study. January 24.

Office of Environmental Health Hazard Assessment (OEHHA)
2015 Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual), February.

San Diego Air Pollution Control District (SDAPCD)
2016 2016 Revision of the Regional Air Quality Strategy for San Diego County, Available at http://www.sdapcd.org/content/dam/sdc/apcd/PDF/Air%20Quality%20Planning/2016%20RAQS.pdf.

2018 Annual Air Quality Monitoring Network Plan. Posted for public viewing April 18, 2018. Submitted for EPA Review June 29, 2018.

San Diego, City of
2016 California Environmental Quality Act Significance Determination Thresholds. July 2016.

University of California, Davis Institute of Transportation Studies
1997 Transportation Project-Level Carbon Monoxide Protocol. December. Davis, CA.

Western Regional Climate Center
2015 Western U.S. Climate Historical Summaries: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7740 and http://www.wrcc.dri.edu/cgi-bin/clilcd.pl?ca23188. Accessed October 9, 2015.

ATTACHMENT 1

CalEEMod Output

7899 Mission Valley CPU - Construction - 5-acre mixed use

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
Apartments Mid Rise	300.00	Dwelling Unit	4.00	300,000.00	858
Strip Mall	10.00	1000sqft	1.00	10,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	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

Project Characteristics -

Land Use - 5-acres
300 multi-family units
10,000 square feet retail

Demolition -

Architectural Coating - SDAPCD Rule 67.0.1

Construction Phase - Architectural coatings simultaneous with last half of building construction

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	18.00	115.00
tblConstructionPhase	PhaseEndDate	12/26/2019	11/6/2019
tblConstructionPhase	PhaseStartDate	12/3/2019	5/30/2019
tblLandUse	LotAcreage	7.89	4.00
tblLandUse	LotAcreage	0.23	1.00

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					
2018	4.6493	48.2607	26.0044	0.0547	18.2141	2.5780	20.7921	9.9699	2.3717	12.3416	0.0000	5,454.0049	5,454.0049	1.1981	0.0000	5,473.7943
2019	41.5929	27.9426	27.9017	0.0606	2.3907	1.4639	3.8545	0.6393	1.3842	2.0235	0.0000	6,002.4122	6,002.4122	0.8071	0.0000	6,022.5895
Maximum	**41.5929**	**48.2607**	**27.9017**	**0.0606**	**18.2141**	**2.5780**	**20.7921**	**9.9699**	**2.3717**	**12.3416**	**0.0000**	**6,002.4122**	**6,002.4122**	**1.1981**	**0.0000**	**6,022.5895**

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	4.6493	48.2607	26.0044	0.0547	18.2141	2.5780	20.7921	9.9699	2.3717	12.3416	0.0000	5,454.0049	5,454.0049	1.1981	0.0000	5,473.7943
2019	41.5929	27.9426	27.9017	0.0606	2.3907	1.4639	3.8545	0.6393	1.3842	2.0235	0.0000	6,002.4122	6,002.4122	0.8071	0.0000	6,022.5895
Maximum	**41.5929**	**48.2607**	**27.9017**	**0.0606**	**18.2141**	**2.5780**	**20.7921**	**9.9699**	**2.3717**	**12.3416**	**0.0000**	**6,002.4122**	**6,002.4122**	**1.1981**	**0.0000**	**6,022.5895**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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	11/5/2018	11/30/2018	5	20	
2	Site Preparation	Site Preparation	12/1/2018	12/7/2018	5	5	
3	Grading	Grading	12/8/2018	12/19/2018	5	8	
4	Building Construction	Building Construction	12/20/2018	11/6/2019	5	230	
5	Paving	Paving	11/7/2019	12/2/2019	5	18	
6	Architectural Coating	Architectural Coating	5/30/2019	11/6/2019	5	115	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 607,500; Residential Outdoor: 202,500; Non-Residential Indoor: 15,000; Non-Residential Outdoor: 5,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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	6	15.00	0.00	91.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	219.00	34.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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					
Fugitive Dust					0.9966	0.0000	0.9966	0.1509	0.0000	0.1509			0.0000			0.0000
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**	**0.9966**	**1.9386**	**2.9352**	**0.1509**	**1.8048**	**1.9558**		**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0428	1.4627	0.3209	3.6000e-003	0.0795	5.8300e-003	0.0853	0.0218	5.5700e-003	0.0274		391.4086	391.4086	0.0364		392.3186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0516	0.4871	1.2700e-003	0.1232	8.9000e-004	0.1241	0.0327	8.2000e-004	0.0335		126.3491	126.3491	4.3800e-003		126.4586
Total	**0.1150**	**1.5144**	**0.8080**	**4.8700e-003**	**0.2027**	**6.7200e-003**	**0.2094**	**0.0545**	**6.3900e-003**	**0.0609**		**517.7577**	**517.7577**	**0.0408**		**518.7772**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.9966	0.0000	0.9966	0.1509	0.0000	0.1509			0.0000			0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	**3.7190**	**38.3225**	**22.3040**	**0.0388**	**0.9966**	**1.9386**	**2.9352**	**0.1509**	**1.8048**	**1.9558**	**0.0000**	**3,871.7665**	**3,871.7665**	**1.0667**		**3,898.4344**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0428	1.4627	0.3209	3.6000e-003	0.0795	5.8300e-003	0.0853	0.0218	5.5700e-003	0.0274		391.4086	391.4086	0.0364		392.3186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0516	0.4871	1.2700e-003	0.1232	8.9000e-004	0.1241	0.0327	8.2000e-004	0.0335		126.3491	126.3491	4.3800e-003		126.4586
Total	**0.1150**	**1.5144**	**0.8080**	**4.8700e-003**	**0.2027**	**6.7200e-003**	**0.2094**	**0.0545**	**6.3900e-003**	**0.0609**		**517.7577**	**517.7577**	**0.0408**		**518.7772**

3.3 Site Preparation - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**		**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0866	0.0620	0.5845	1.5200e-003	0.1479	1.0600e-003	0.1489	0.0392	9.8000e-004	0.0402		151.6189	151.6189	5.2500e-003		151.7503
Total	**0.0866**	**0.0620**	**0.5845**	**1.5200e-003**	**0.1479**	**1.0600e-003**	**0.1489**	**0.0392**	**9.8000e-004**	**0.0402**		**151.6189**	**151.6189**	**5.2500e-003**		**151.7503**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	**4.5627**	**48.1988**	**22.4763**	**0.0380**	**18.0663**	**2.5769**	**20.6432**	**9.9307**	**2.3708**	**12.3014**	**0.0000**	**3,831.6239**	**3,831.6239**	**1.1928**		**3,861.4448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0866	0.0620	0.5845	1.5200e-003	0.1479	1.0600e-003	0.1489	0.0392	9.8000e-004	0.0402		151.6189	151.6189	5.2500e-003		151.7503
Total	**0.0866**	**0.0620**	**0.5845**	**1.5200e-003**	**0.1479**	**1.0600e-003**	**0.1489**	**0.0392**	**9.8000e-004**	**0.0402**		**151.6189**	**151.6189**	**5.2500e-003**		**151.7503**

3.4 Grading - 2018

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272		2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.5523**	**1.5513**	**8.1037**	**3.3675**	**1.4272**	**4.7947**		**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0516	0.4871	1.2700e-003	0.1232	8.9000e-004	0.1241	0.0327	8.2000e-004	0.0335		126.3491	126.3491	4.3800e-003		126.4586
Total	**0.0721**	**0.0516**	**0.4871**	**1.2700e-003**	**0.1232**	**8.9000e-004**	**0.1241**	**0.0327**	**8.2000e-004**	**0.0335**		**126.3491**	**126.3491**	**4.3800e-003**		**126.4586**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272	0.0000	2,988.0216	2,988.0216	0.9302		3,011.2769
Total	**2.7733**	**30.6725**	**16.5770**	**0.0297**	**6.5523**	**1.5513**	**8.1037**	**3.3675**	**1.4272**	**4.7947**	**0.0000**	**2,988.0216**	**2,988.0216**	**0.9302**		**3,011.2769**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0516	0.4871	1.2700e-003	0.1232	8.9000e-004	0.1241	0.0327	8.2000e-004	0.0335		126.3491	126.3491	4.3800e-003		126.4586
Total	**0.0721**	**0.0516**	**0.4871**	**1.2700e-003**	**0.1232**	**8.9000e-004**	**0.1241**	**0.0327**	**8.2000e-004**	**0.0335**		**126.3491**	**126.3491**	**4.3800e-003**		**126.4586**

3.5 Building Construction - 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	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**		**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1828	4.4873	1.3124	9.2400e-003	0.2302	0.0356	0.2658	0.0663	0.0341	0.1003		988.3730	988.3730	0.0855		990.5111
Worker	1.0530	0.7540	7.1115	0.0185	1.7990	0.0130	1.8120	0.4772	0.0119	0.4891		1,844.6967	1,844.6967	0.0639		1,846.2949
Total	**1.2358**	**5.2412**	**8.4239**	**0.0278**	**2.0292**	**0.0486**	**2.0778**	**0.5435**	**0.0460**	**0.5895**		**2,833.0697**	**2,833.0697**	**0.1495**		**2,836.8061**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	**2.6795**	**23.3900**	**17.5804**	**0.0269**		**1.4999**	**1.4999**		**1.4099**	**1.4099**	**0.0000**	**2,620.9351**	**2,620.9351**	**0.6421**		**2,636.9883**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1828	4.4873	1.3124	9.2400e-003	0.2302	0.0356	0.2658	0.0663	0.0341	0.1003		988.3730	988.3730	0.0855		990.5111
Worker	1.0530	0.7540	7.1115	0.0185	1.7990	0.0130	1.8120	0.4772	0.0119	0.4891		1,844.6967	1,844.6967	0.0639		1,846.2949
Total	**1.2358**	**5.2412**	**8.4239**	**0.0278**	**2.0292**	**0.0486**	**2.0778**	**0.5435**	**0.0460**	**0.5895**		**2,833.0697**	**2,833.0697**	**0.1495**		**2,836.8061**

3.5 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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1632	4.2190	1.2067	9.1500e-003	0.2302	0.0299	0.2600	0.0663	0.0286	0.0948		980.9009	980.9009	0.0827		982.9674
Worker	0.9725	0.6740	6.4034	0.0180	1.7990	0.0128	1.8119	0.4772	0.0118	0.4890		1,789.0411	1,789.0411	0.0577		1,790.4843
Total	**1.1358**	**4.8930**	**7.6101**	**0.0271**	**2.0292**	**0.0427**	**2.0719**	**0.5435**	**0.0404**	**0.5838**		**2,769.9420**	**2,769.9420**	**0.1404**		**2,773.4517**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1632	4.2190	1.2067	9.1500e-003	0.2302	0.0299	0.2600	0.0663	0.0286	0.0948		980.9009	980.9009	0.0827		982.9674
Worker	0.9725	0.6740	6.4034	0.0180	1.7990	0.0128	1.8119	0.4772	0.0118	0.4890		1,789.0411	1,789.0411	0.0577		1,790.4843
Total	**1.1358**	**4.8930**	**7.6101**	**0.0271**	**2.0292**	**0.0427**	**2.0719**	**0.5435**	**0.0404**	**0.5838**		**2,769.9420**	**2,769.9420**	**0.1404**		**2,773.4517**

3.6 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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0666	0.0462	0.4386	1.2300e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		122.5371	122.5371	3.9500e-003		122.6359
Total	**0.0666**	**0.0462**	**0.4386**	**1.2300e-003**	**0.1232**	**8.8000e-004**	**0.1241**	**0.0327**	**8.1000e-004**	**0.0335**		**122.5371**	**122.5371**	**3.9500e-003**		**122.6359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0666	0.0462	0.4386	1.2300e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		122.5371	122.5371	3.9500e-003		122.6359
Total	**0.0666**	**0.0462**	**0.4386**	**1.2300e-003**	**0.1232**	**8.8000e-004**	**0.1241**	**0.0327**	**8.1000e-004**	**0.0335**		**122.5371**	**122.5371**	**3.9500e-003**		**122.6359**

3.7 Architectural Coating - 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					
Archit. Coating	37.6342					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	**37.9006**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**		**281.4481**	**281.4481**	**0.0238**		**282.0423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1954	0.1354	1.2865	3.6100e-003	0.3615	2.5800e-003	0.3640	0.0959	2.3700e-003	0.0983		359.4421	359.4421	0.0116		359.7320
Total	**0.1954**	**0.1354**	**1.2865**	**3.6100e-003**	**0.3615**	**2.5800e-003**	**0.3640**	**0.0959**	**2.3700e-003**	**0.0983**		**359.4421**	**359.4421**	**0.0116**		**359.7320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	37.6342					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	**37.9006**	**1.8354**	**1.8413**	**2.9700e-003**		**0.1288**	**0.1288**		**0.1288**	**0.1288**	**0.0000**	**281.4481**	**281.4481**	**0.0238**		**282.0423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1954	0.1354	1.2865	3.6100e-003	0.3615	2.5800e-003	0.3640	0.0959	2.3700e-003	0.0983		359.4421	359.4421	0.0116		359.7320
Total	**0.1954**	**0.1354**	**1.2865**	**3.6100e-003**	**0.3615**	**2.5800e-003**	**0.3640**	**0.0959**	**2.3700e-003**	**0.0983**		**359.4421**	**359.4421**	**0.0116**		**359.7320**

7899 Mission Valley CPU - Construction - Stadium Site

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
Apartments Mid Rise	5,000.00	Dwelling Unit	112.00	5,000,000.00	14300
Regional Shopping Center	1,000.00	1000sqft	20.00	1,000,000.00	0
General Office Building	2,000.00	1000sqft	45.00	2,000,000.00	0
Arena	6.00	Acre	6.00	261,360.00	0
City Park	50.00	Acre	50.00	2,178,000.00	0

1.2 Other Project Characteristics

Urbanization Urban | **Wind Speed (m/s)** 2.6 | **Precipitation Freq (Days)** 40

Climate Zone 13 | **Operational Year** 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

Project Characteristics -

Land Use - 233-acres

Demolition -

Architectural Coating - SDAPCD Rule 67.0.1

Construction Phase - 5 two-year phases

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

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Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Off-road Equipment - Equipment doubled

Grading -

Off-road Equipment - 10

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	4,650.00	432.00
tblConstructionPhase	NumDays	180.00	17.00
tblConstructionPhase	NumDays	465.00	43.00
tblConstructionPhase	NumDays	330.00	31.00
tblConstructionPhase	NumDays	180.00	17.00
tblConstructionPhase	NumDays	465.00	43.00
tblConstructionPhase	NumDays	4,650.00	430.00
tblConstructionPhase	NumDays	330.00	30.00
tblConstructionPhase	NumDays	180.00	17.00
tblConstructionPhase	NumDays	465.00	43.00
tblConstructionPhase	NumDays	4,650.00	432.00
tblConstructionPhase	NumDays	330.00	31.00
tblConstructionPhase	NumDays	180.00	17.00
tblConstructionPhase	NumDays	465.00	43.00
tblConstructionPhase	NumDays	4,650.00	432.00
tblConstructionPhase	NumDays	330.00	30.00
tblConstructionPhase	NumDays	180.00	17.00
tblConstructionPhase	NumDays	465.00	43.00
tblConstructionPhase	NumDays	4,650.00	430.00
tblConstructionPhase	NumDays	330.00	31.00
tblConstructionPhase	NumDays	330.00	2,518.00
tblConstructionPhase	PhaseEndDate	2/18/2039	11/18/2021
tblConstructionPhase	PhaseEndDate	4/23/2021	3/24/2020
tblConstructionPhase	PhaseEndDate	5/25/2040	12/31/2021
tblConstructionPhase	PhaseEndDate	7/12/2019	1/23/2020

tblConstructionPhase	PhaseStartDate	4/24/2021	3/25/2020
tblConstructionPhase	PhaseStartDate	7/13/2019	1/24/2020
tblConstructionPhase	PhaseStartDate	2/19/2039	11/19/2021
tblConstructionPhase	PhaseStartDate	11/5/2018	1/1/2020
tblLandUse	LotAcreage	131.58	112.00
tblLandUse	LotAcreage	22.96	20.00
tblLandUse	LotAcreage	45.91	45.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
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	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

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					
2020	81.5600	234.4786	276.5813	0.9962	64.7088	4.5314	69.2402	19.9376	4.3328	23.9827	0.0000	101,791.7820	101,791.7820	6.3470	0.0000	101,950.4573
2021	78.2881	211.8606	259.6270	0.9741	64.7088	3.5558	68.2646	17.3822	3.3973	20.7795	0.0000	99,633.8189	99,633.8189	6.0502	0.0000	99,785.0745
2022	76.0619	197.4916	244.9260	0.9510	64.7088	4.1512	67.7895	22.3715	3.8845	26.2147	0.0000	97,370.3257	97,370.3257	5.8071	0.0000	97,515.5043
2023	73.4448	163.4205	229.5546	0.9219	64.7087	2.6068	67.3155	17.3822	2.4893	19.8715	0.0000	94,483.8998	94,483.8998	5.3942	0.0000	94,618.7545
2024	71.8987	158.0314	218.7157	0.9003	64.7087	3.3418	67.0330	22.3715	3.1232	25.2993	0.0000	92,371.8784	92,371.8784	5.2403	0.0000	92,502.8859
2025	70.5206	152.8078	208.8694	0.8791	64.7087	2.0488	66.7575	17.3822	1.9526	19.3347	0.0000	90,297.4808	90,297.4808	5.1092	0.0000	90,425.2111
2026	69.5884	150.4891	200.8000	0.8605	64.7087	2.8358	66.7425	22.3715	2.6502	24.9403	0.0000	88,477.5683	88,477.5683	5.0072	0.0000	88,602.7492
2027	68.6592	148.3239	193.6704	0.8440	64.7087	2.0123	66.7209	17.3821	1.9186	19.3007	0.0000	86,865.2756	86,865.2756	4.9187	0.0000	86,988.2435
2028	67.6808	146.4871	187.6124	0.8297	64.7087	2.8285	66.6944	22.3715	2.6434	24.9336	0.0000	85,459.3766	85,459.3766	4.8420	0.0000	85,580.4257
2029	66.6199	144.6649	181.8152	0.8169	64.7086	1.9612	66.6698	17.3821	1.8713	19.2534	0.0000	84,206.7113	84,206.7113	4.7753	0.0000	84,326.0947
Maximum	**81.5600**	**234.4786**	**276.5813**	**0.9962**	**64.7088**	**4.5314**	**69.2402**	**22.3715**	**4.3328**	**26.2147**	**0.0000**	**101,791.7820**	**101,791.7820**	**6.3470**	**0.0000**	**101,950.4573**

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					
2020	81.5600	234.4786	276.5813	0.9962	64.7088	4.5314	69.2402	19.9376	4.3328	23.9827	0.0000	101,791.7820	101,791.7820	6.3470	0.0000	101,950.4573
2021	78.2881	211.8606	259.6270	0.9741	64.7088	3.5558	68.2646	17.3822	3.3973	20.7795	0.0000	99,633.8189	99,633.8189	6.0502	0.0000	99,785.0745
2022	76.0619	197.4916	244.9260	0.9510	64.7088	4.1512	67.7895	22.3715	3.8845	26.2147	0.0000	97,370.3257	97,370.3257	5.8071	0.0000	97,515.5043
2023	73.4448	163.4205	229.5546	0.9219	64.7087	2.6068	67.3155	17.3822	2.4893	19.8715	0.0000	94,483.8998	94,483.8998	5.3942	0.0000	94,618.7545
2024	71.8987	158.0314	218.7157	0.9003	64.7087	3.3418	67.0330	22.3715	3.1232	25.2993	0.0000	92,371.8784	92,371.8784	5.2403	0.0000	92,502.8859
2025	70.5206	152.8078	208.8694	0.8791	64.7087	2.0488	66.7575	17.3822	1.9526	19.3347	0.0000	90,297.4808	90,297.4808	5.1092	0.0000	90,425.2111
2026	69.5884	150.4891	200.8000	0.8605	64.7087	2.8358	66.7425	22.3715	2.6502	24.9403	0.0000	88,477.5682	88,477.5682	5.0072	0.0000	88,602.7492
2027	68.6592	148.3239	193.6704	0.8440	64.7087	2.0123	66.7209	17.3821	1.9186	19.3007	0.0000	86,865.2756	86,865.2756	4.9187	0.0000	86,988.2434
2028	67.6808	146.4871	187.6124	0.8297	64.7087	2.8285	66.6944	22.3715	2.6434	24.9336	0.0000	85,459.3766	85,459.3766	4.8420	0.0000	85,580.4257
2029	66.6199	144.6649	181.8152	0.8169	64.7086	1.9612	66.6698	17.3821	1.8713	19.2534	0.0000	84,206.7113	84,206.7113	4.7753	0.0000	84,326.0947
Maximum	**81.5600**	**234.4786**	**276.5813**	**0.9962**	**64.7088**	**4.5314**	**69.2402**	**22.3715**	**4.3328**	**26.2147**	**0.0000**	**101,791.7820**	**101,791.7820**	**6.3470**	**0.0000**	**101,950.4573**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**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	Phase 1 - Site Preparation	Site Preparation	1/1/2020	1/23/2020	5	17	
2	Phase 1 - Grading	Grading	1/24/2020	3/24/2020	5	43	
3	Phase 1 - Building Construction	Building Construction	3/25/2020	11/18/2021	5	432	
4	Phases All - Architectural Coating	Architectural Coating	3/25/2020	11/16/2029	5	2518	
5	Phase 1 - Paving	Paving	11/19/2021	12/31/2021	5	31	
6	Phase 2 - Site Preparation	Site Preparation	1/3/2022	1/25/2022	5	17	
7	Phase 2 - Grading	Grading	1/26/2022	3/25/2022	5	43	
8	Phase 2 - Building Construction	Building Construction	3/28/2022	11/17/2023	5	430	
9	Phase 2 - Paving	Paving	11/20/2023	12/29/2023	5	30	
10	Phase 3 - Site Preparation	Site Preparation	1/1/2024	1/23/2024	5	17	
11	Phase 3 - Grading	Grading	1/24/2024	3/22/2024	5	43	
12	Phase 3 - Building Construction	Building Construction	3/25/2024	11/18/2025	5	432	
13	Phase 3 - Paving	Paving	11/19/2025	12/31/2025	5	31	
14	Phase 4 - Site Preparation	Site Preparation	1/1/2026	1/23/2026	5	17	
15	Phase 4 - Grading	Grading	1/26/2026	3/25/2026	5	43	
16	Phase 4 - Building Construction	Building Construction	3/26/2026	11/19/2027	5	432	
17	Phase 4 - Paving	Paving	11/22/2027	12/31/2027	5	30	
18	Phase 5 - Site Preparation	Site Preparation	1/3/2028	1/25/2028	5	17	
19	Phase 5 - Grading	Grading	1/26/2028	3/24/2028	5	43	
20	Phase 5 - Building Construction	Building Construction	3/27/2028	11/16/2029	5	430	
21	Phase 5 - Paving	Paving	11/19/2029	12/31/2029	5	31	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 10,125,000; Residential Outdoor: 3,375,000; Non-Residential Indoor: 4,892,040; Non-Residential Outdoor: 1,630,680;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase 5 - Paving	Air Compressors	2	6.00	78	0.48
Phase 4 - Building Construction	Cranes	2	7.00	231	0.29
Phase 5 - Building Construction	Cranes	2	7.00	231	0.29
Phase 4 - Grading	Excavators	4	8.00	158	0.38
Phase 5 - Grading	Excavators	4	8.00	158	0.38
Phase 4 - Building Construction	Forklifts	6	8.00	89	0.20
Phase 5 - Building Construction	Forklifts	6	8.00	89	0.20
Phase 4 - Building Construction	Generator Sets	2	8.00	84	0.74
Phase 5 - Building Construction	Generator Sets	2	8.00	84	0.74
Phase 4 - Grading	Graders	2	8.00	187	0.41
Phase 5 - Grading	Graders	2	8.00	187	0.41
Phase 4 - Paving	Pavers	4	8.00	130	0.42
Phase 5 - Paving	Pavers	4	8.00	130	0.42
Phase 4 - Paving	Paving Equipment	4	8.00	132	0.36
Phase 5 - Paving	Paving Equipment	4	8.00	132	0.36
Phase 4 - Paving	Rollers	4	8.00	80	0.38
Phase 5 - Paving	Rollers	4	8.00	80	0.38
Phase 4 - Grading	Rubber Tired Dozers	2	8.00	247	0.40
Phase 5 - Grading	Rubber Tired Dozers	2	8.00	247	0.40
Phase 4 - Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Phase 5 - Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Phase 4 - Grading	Scrapers	4	8.00	367	0.48
Phase 5 - Grading	Scrapers	4	8.00	367	0.48
Phase 4 - Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Phase 5 - Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Phase 4 - Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 5 - Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 4 - Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37

Phase 5 - Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Phase 4 - Building Construction	Welders	2	8.00	46	0.45
Phase 5 - Building Construction	Welders	2	8.00	46	0.45
Phases All - Architectural Coating	Air Compressors	10	6.00	78	0.48
Phase 1 - Paving	Air Compressors	2	6.00	78	0.48
Phase 2 - Paving	Air Compressors	2	6.00	78	0.48
Phase 2 - Building Construction	Cranes	2	7.00	231	0.29
Phase 1 - Grading	Excavators	4	8.00	158	0.38
Phase 1 - Building Construction	Cranes	2	7.00	231	0.29
Phase 1 - Building Construction	Forklifts	6	8.00	89	0.20
Phase 1 - Building Construction	Generator Sets	2	8.00	84	0.74
Phase 1 - Paving	Pavers	4	8.00	130	0.42
Phase 1 - Paving	Rollers	4	8.00	80	0.38
Phase 2 - Grading	Excavators	4	8.00	158	0.38
Phase 1 - Grading	Rubber Tired Dozers	2	8.00	247	0.40
Phase 1 - Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Phase 1 - Grading	Graders	2	8.00	187	0.41
Phase 1 - Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 1 - Paving	Paving Equipment	4	8.00	132	0.36
Phase 1 - Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Phase 1 - Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Phase 1 - Building Construction	Welders	2	8.00	46	0.45
Phase 1 - Grading	Scrapers	4	8.00	367	0.48
Phase 2 - Building Construction	Forklifts	6	8.00	89	0.20
Phase 2 - Building Construction	Generator Sets	2	8.00	84	0.74
Phase 2 - Grading	Graders	2	8.00	187	0.41
Phase 2 - Paving	Pavers	4	8.00	130	0.42
Phase 2 - Paving	Paving Equipment	4	8.00	132	0.36
Phase 2 - Paving	Rollers	4	8.00	80	0.38
Phase 2 - Grading	Rubber Tired Dozers	2	8.00	247	0.40

Phase 2 - Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Phase 2 - Grading	Scrapers	4	8.00	367	0.48
Phase 2 - Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Phase 2 - Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 2 - Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Phase 2 - Building Construction	Welders	2	8.00	46	0.45
Phase 3 - Paving	Air Compressors	2	6.00	78	0.48
Phase 3 - Building Construction	Cranes	2	7.00	231	0.29
Phase 3 - Grading	Excavators	4	8.00	158	0.38
Phase 3 - Building Construction	Forklifts	6	8.00	89	0.20
Phase 3 - Building Construction	Generator Sets	2	8.00	84	0.74
Phase 3 - Grading	Graders	2	8.00	187	0.41
Phase 3 - Paving	Pavers	4	8.00	130	0.42
Phase 3 - Paving	Paving Equipment	4	8.00	132	0.36
Phase 3 - Paving	Rollers	4	8.00	80	0.38
Phase 3 - Grading	Rubber Tired Dozers	2	8.00	247	0.40
Phase 3 - Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Phase 3 - Grading	Scrapers	4	8.00	367	0.48
Phase 3 - Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Phase 3 - Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 3 - Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Phase 3 - Building Construction	Welders	2	8.00	46	0.45
Phase 4 - Paving	Air Compressors	2	6.00	78	0.48

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
Phase 2 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 - Site Preparation	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 - Grading	16	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 - Building Construction	18	5,585.00	1,426.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 - Building Construction	18	5,585.00	1,426.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 - Grading	16	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 - Site Preparation	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 - Building Construction	18	5,585.00	1,426.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 - Grading	16	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 - Site Preparation	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 5 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 - Building Construction	18	5,585.00	1,426.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 5 - Building Construction	18	5,585.00	1,426.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 - Grading	16	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 5 - Grading	16	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 5 - Paving	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 - Site Preparation	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 5 - Site Preparation	14	35.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phases All - Architectural Coating	10	1,117.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Phase 1 - Site Preparation - 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432		7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**36.1325**	**4.3948**	**40.5273**	**19.8614**	**4.0432**	**23.9046**		**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1455	0.0972	0.9354	2.7800e-003	0.2875	2.0200e-003	0.2895	0.0763	1.8600e-003	0.0781		276.8962	276.8962	8.3400e-003		277.1046
Total	**0.1455**	**0.0972**	**0.9354**	**2.7800e-003**	**0.2875**	**2.0200e-003**	**0.2895**	**0.0763**	**1.8600e-003**	**0.0781**		**276.8962**	**276.8962**	**8.3400e-003**		**277.1046**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	8.1529	84.8347	43.0272	0.0760		4.3948	4.3948		4.0432	4.0432	0.0000	7,370.2031	7,370.2031	2.3837		7,429.7949
Total	**8.1529**	**84.8347**	**43.0272**	**0.0760**	**36.1325**	**4.3948**	**40.5273**	**19.8614**	**4.0432**	**23.9046**	**0.0000**	**7,370.2031**	**7,370.2031**	**2.3837**		**7,429.7949**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1455	0.0972	0.9354	2.7800e-003	0.2875	2.0200e-003	0.2895	0.0763	1.8600e-003	0.0781		276.8962	276.8962	8.3400e-003		277.1046
Total	**0.1455**	**0.0972**	**0.9354**	**2.7800e-003**	**0.2875**	**2.0200e-003**	**0.2895**	**0.0763**	**1.8600e-003**	**0.0781**		**276.8962**	**276.8962**	**8.3400e-003**		**277.1046**

3.3 Phase 1 - 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000		12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**17.3467**	**4.3478**	**21.6945**	**7.1930**	**4.0000**	**11.1930**		**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1662	0.1110	1.0690	3.1800e-003	0.3286	2.3100e-003	0.3309	0.0872	2.1200e-003	0.0893		316.4528	316.4528	9.5300e-003		316.6910
Total	**0.1662**	**0.1110**	**1.0690**	**3.1800e-003**	**0.3286**	**2.3100e-003**	**0.3309**	**0.0872**	**2.1200e-003**	**0.0893**		**316.4528**	**316.4528**	**9.5300e-003**		**316.6910**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	8.9002	100.3950	63.9166	0.1240		4.3478	4.3478		4.0000	4.0000	0.0000	12,011.7305	12,011.7305	3.8848		12,108.8515
Total	**8.9002**	**100.3950**	**63.9166**	**0.1240**	**17.3467**	**4.3478**	**21.6945**	**7.1930**	**4.0000**	**11.1930**	**0.0000**	**12,011.7305**	**12,011.7305**	**3.8848**		**12,108.8515**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1662	0.1110	1.0690	3.1800e-003	0.3286	2.3100e-003	0.3309	0.0872	2.1200e-003	0.0893		316.4528	316.4528	9.5300e-003		316.6910
Total	**0.1662**	**0.1110**	**1.0690**	**3.1800e-003**	**0.3286**	**2.3100e-003**	**0.3309**	**0.0872**	**2.1200e-003**	**0.0893**		**316.4528**	**316.4528**	**9.5300e-003**		**316.6910**

3.4 Phase 1 - 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	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007		5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**		**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5809	160.6634	45.4612	0.3805	9.6535	0.8016	10.4551	2.7789	0.7668	3.5457		40,849.5120	40,849.5120	3.2870		40,931.6879
Worker	23.2115	15.5040	149.2574	0.4435	45.8795	0.3220	46.2014	12.1694	0.2966	12.4660		44,184.7195	44,184.7195	1.3303		44,217.9769
Total	**28.7924**	**176.1674**	**194.7186**	**0.8239**	**55.5329**	**1.1236**	**56.6565**	**14.9483**	**1.0634**	**16.0117**		**85,034.2315**	**85,034.2315**	**4.6173**		**85,149.6648**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	4.2397	38.3721	33.6970	0.0538		2.2341	2.2341		2.1007	2.1007	0.0000	5,106.1261	5,106.1261	1.2457		5,137.2690
Total	**4.2397**	**38.3721**	**33.6970**	**0.0538**		**2.2341**	**2.2341**		**2.1007**	**2.1007**	**0.0000**	**5,106.1261**	**5,106.1261**	**1.2457**		**5,137.2690**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5809	160.6634	45.4612	0.3805	9.6535	0.8016	10.4551	2.7789	0.7668	3.5457		40,849.5120	40,849.5120	3.2870		40,931.6879
Worker	23.2115	15.5040	149.2574	0.4435	45.8795	0.3220	46.2014	12.1694	0.2966	12.4660		44,184.7195	44,184.7195	1.3303		44,217.9769
Total	**28.7924**	**176.1674**	**194.7186**	**0.8239**	**55.5329**	**1.1236**	**56.6565**	**14.9483**	**1.0634**	**16.0117**		**85,034.2315**	**85,034.2315**	**4.6173**		**85,149.6648**

3.4 Phase 1 - 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	3.8019	34.8642	33.1504	0.0538		1.9172	1.9172		1.8026	1.8026		5,106.7278	5,106.7278	1.2320		5,137.5285
Total	**3.8019**	**34.8642**	**33.1504**	**0.0538**		**1.9172**	**1.9172**		**1.8026**	**1.8026**		**5,106.7278**	**5,106.7278**	**1.2320**		**5,137.5285**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.5453	144.8225	41.2036	0.3764	9.6535	0.3173	9.9707	2.7789	0.3034	3.0824		40,472.6322	40,472.6322	3.1529		40,551.4557
Worker	21.9068	14.0879	139.2479	0.4285	45.8795	0.3169	46.1964	12.1694	0.2919	12.4613		42,699.9820	42,699.9820	1.2268		42,730.6510
Total	**26.4521**	**158.9104**	**180.4515**	**0.8048**	**55.5329**	**0.6342**	**56.1671**	**14.9483**	**0.5954**	**15.5437**		**83,172.6142**	**83,172.6142**	**4.3797**		**83,282.1067**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	3.8019	34.8642	33.1504	0.0538		1.9172	1.9172		1.8026	1.8026	0.0000	5,106.7278	5,106.7278	1.2320		5,137.5285
Total	**3.8019**	**34.8642**	**33.1504**	**0.0538**		**1.9172**	**1.9172**		**1.8026**	**1.8026**	**0.0000**	**5,106.7278**	**5,106.7278**	**1.2320**		**5,137.5285**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.5453	144.8225	41.2036	0.3764	9.6535	0.3173	9.9707	2.7789	0.3034	3.0824		40,472.6322	40,472.6322	3.1529		40,551.4557
Worker	21.9068	14.0879	139.2479	0.4285	45.8795	0.3169	46.1964	12.1694	0.2919	12.4613		42,699.9820	42,699.9820	1.2268		42,730.6510
Total	**26.4521**	**158.9104**	**180.4515**	**0.8048**	**55.5329**	**0.6342**	**56.1671**	**14.9483**	**0.5954**	**15.5437**		**83,172.6142**	**83,172.6142**	**4.3797**		**83,282.1067**

3.5 Phases All - 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.4218	16.8384	18.3142	0.0297		1.1094	1.1094		1.1094	1.1094		2,814.4805	2,814.4805	0.2179		2,819.9282
Total	**43.8856**	**16.8384**	**18.3142**	**0.0297**		**1.1094**	**1.1094**		**1.1094**	**1.1094**		**2,814.4805**	**2,814.4805**	**0.2179**		**2,819.9282**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6423	3.1008	29.8515	0.0887	9.1759	0.0644	9.2403	2.4339	0.0593	2.4932		8,836.9439	8,836.9439	0.2661		8,843.5954
Total	**4.6423**	**3.1008**	**29.8515**	**0.0887**	**9.1759**	**0.0644**	**9.2403**	**2.4339**	**0.0593**	**2.4932**		**8,836.9439**	**8,836.9439**	**0.2661**		**8,843.5954**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.4218	16.8384	18.3142	0.0297		1.1094	1.1094		1.1094	1.1094	0.0000	2,814.4805	2,814.4805	0.2179		2,819.9282
Total	**43.8856**	**16.8384**	**18.3142**	**0.0297**		**1.1094**	**1.1094**		**1.1094**	**1.1094**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.2179**		**2,819.9282**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.6423	3.1008	29.8515	0.0887	9.1759	0.0644	9.2403	2.4339	0.0593	2.4932		8,836.9439	8,836.9439	0.2661		8,843.5954
Total	**4.6423**	**3.1008**	**29.8515**	**0.0887**	**9.1759**	**0.0644**	**9.2403**	**2.4339**	**0.0593**	**2.4932**		**8,836.9439**	**8,836.9439**	**0.2661**		**8,843.5954**

3.5 Phases All - 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.1890	15.2685	18.1755	0.0297		0.9410	0.9410		0.9410	0.9410		2,814.4805	2,814.4805	0.1932		2,819.3091
Total	**43.6528**	**15.2685**	**18.1755**	**0.0297**		**0.9410**	**0.9410**		**0.9410**	**0.9410**		**2,814.4805**	**2,814.4805**	**0.1932**		**2,819.3091**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.3814	2.8176	27.8496	0.0857	9.1759	0.0634	9.2393	2.4339	0.0584	2.4923		8,539.9964	8,539.9964	0.2454		8,546.1302
Total	**4.3814**	**2.8176**	**27.8496**	**0.0857**	**9.1759**	**0.0634**	**9.2393**	**2.4339**	**0.0584**	**2.4923**		**8,539.9964**	**8,539.9964**	**0.2454**		**8,546.1302**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.1890	15.2685	18.1755	0.0297		0.9410	0.9410		0.9410	0.9410	0.0000	2,814.4805	2,814.4805	0.1932		2,819.3091
Total	**43.6528**	**15.2685**	**18.1755**	**0.0297**		**0.9410**	**0.9410**		**0.9410**	**0.9410**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1932**		**2,819.3091**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.3814	2.8176	27.8496	0.0857	9.1759	0.0634	9.2393	2.4339	0.0584	2.4923		8,539.9964	8,539.9964	0.2454		8,546.1302
Total	**4.3814**	**2.8176**	**27.8496**	**0.0857**	**9.1759**	**0.0634**	**9.2393**	**2.4339**	**0.0584**	**2.4923**		**8,539.9964**	**8,539.9964**	**0.2454**		**8,546.1302**

3.5 Phases All - 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.0454	14.0848	18.1359	0.0297		0.8172	0.8172		0.8172	0.8172		2,814.4805	2,814.4805	0.1832		2,819.0615
Total	**43.5092**	**14.0848**	**18.1359**	**0.0297**		**0.8172**	**0.8172**		**0.8172**	**0.8172**		**2,814.4805**	**2,814.4805**	**0.1832**		**2,819.0615**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1520	2.5687	25.8418	0.0825	9.1759	0.0620	9.2379	2.4339	0.0571	2.4910		8,226.9908	8,226.9908	0.2246		8,232.6064
Total	**4.1520**	**2.5687**	**25.8418**	**0.0825**	**9.1759**	**0.0620**	**9.2379**	**2.4339**	**0.0571**	**2.4910**		**8,226.9908**	**8,226.9908**	**0.2246**		**8,232.6064**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	2.0454	14.0848	18.1359	0.0297		0.8172	0.8172		0.8172	0.8172	0.0000	2,814.4805	2,814.4805	0.1832		2,819.0615
Total	**43.5092**	**14.0848**	**18.1359**	**0.0297**		**0.8172**	**0.8172**		**0.8172**	**0.8172**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1832**		**2,819.0615**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	4.1520	2.5687	25.8418	0.0825	9.1759	0.0620	9.2379	2.4339	0.0571	2.4910		8,226.9908	8,226.9908	0.2246		8,232.6064
Total	**4.1520**	**2.5687**	**25.8418**	**0.0825**	**9.1759**	**0.0620**	**9.2379**	**2.4339**	**0.0571**	**2.4910**		**8,226.9908**	**8,226.9908**	**0.2246**		**8,232.6064**

3.5 Phases All - Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.9166	13.0299	18.1112	0.0297		0.7082	0.7082		0.7082	0.7082		2,814.4805	2,814.4805	0.1684		2,818.6901
Total	**43.3805**	**13.0299**	**18.1112**	**0.0297**		**0.7082**	**0.7082**		**0.7082**	**0.7082**		**2,814.4805**	**2,814.4805**	**0.1684**		**2,818.6901**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9425	2.3451	23.9527	0.0794	9.1759	0.0608	9.2367	2.4339	0.0560	2.4898		7,912.7856	7,912.7856	0.2053		7,917.9182
Total	**3.9425**	**2.3451**	**23.9527**	**0.0794**	**9.1759**	**0.0608**	**9.2367**	**2.4339**	**0.0560**	**2.4898**		**7,912.7856**	**7,912.7856**	**0.2053**		**7,917.9182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.9166	13.0299	18.1112	0.0297		0.7082	0.7082		0.7082	0.7082	0.0000	2,814.4805	2,814.4805	0.1684		2,818.6901
Total	**43.3805**	**13.0299**	**18.1112**	**0.0297**		**0.7082**	**0.7082**		**0.7082**	**0.7082**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1684**		**2,818.6901**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.9425	2.3451	23.9527	0.0794	9.1759	0.0608	9.2367	2.4339	0.0560	2.4898		7,912.7856	7,912.7856	0.2053		7,917.9182
Total	**3.9425**	**2.3451**	**23.9527**	**0.0794**	**9.1759**	**0.0608**	**9.2367**	**2.4339**	**0.0560**	**2.4898**		**7,912.7856**	**7,912.7856**	**0.2053**		**7,917.9182**

3.5 Phases All - Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.8077	12.1880	18.1013	0.0297		0.6092	0.6092		0.6092	0.6092		2,814.4805	2,814.4805	0.1585		2,818.4425
Total	**43.2715**	**12.1880**	**18.1013**	**0.0297**		**0.6092**	**0.6092**		**0.6092**	**0.6092**		**2,814.4805**	**2,814.4805**	**0.1585**		**2,818.4425**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.7562	2.1507	22.3603	0.0762	9.1759	0.0597	9.2356	2.4339	0.0549	2.4888		7,601.3183	7,601.3183	0.1885		7,606.0312
Total	**3.7562**	**2.1507**	**22.3603**	**0.0762**	**9.1759**	**0.0597**	**9.2356**	**2.4339**	**0.0549**	**2.4888**		**7,601.3183**	**7,601.3183**	**0.1885**		**7,606.0312**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.8077	12.1880	18.1013	0.0297		0.6092	0.6092		0.6092	0.6092	0.0000	2,814.4805	2,814.4805	0.1585		2,818.4425
Total	**43.2715**	**12.1880**	**18.1013**	**0.0297**		**0.6092**	**0.6092**		**0.6092**	**0.6092**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1585**		**2,818.4425**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.7562	2.1507	22.3603	0.0762	9.1759	0.0597	9.2356	2.4339	0.0549	2.4888		7,601.3183	7,601.3183	0.1885		7,606.0312
Total	**3.7562**	**2.1507**	**22.3603**	**0.0762**	**9.1759**	**0.0597**	**9.2356**	**2.4339**	**0.0549**	**2.4888**		**7,601.3183**	**7,601.3183**	**0.1885**		**7,606.0312**

3.5 Phases All - Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151		2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**		**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.5934	1.9828	20.8646	0.0731	9.1759	0.0587	9.2346	2.4339	0.0541	2.4879		7,294.0712	7,294.0712	0.1739		7,298.4195
Total	**3.5934**	**1.9828**	**20.8646**	**0.0731**	**9.1759**	**0.0587**	**9.2346**	**2.4339**	**0.0541**	**2.4879**		**7,294.0712**	**7,294.0712**	**0.1739**		**7,298.4195**

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	lb/day										lb/day					
Archit. Coating	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151	0.0000	2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.5934	1.9828	20.8646	0.0731	9.1759	0.0587	9.2346	2.4339	0.0541	2.4879		7,294.0712	7,294.0712	0.1739		7,298.4195
Total	**3.5934**	**1.9828**	**20.8646**	**0.0731**	**9.1759**	**0.0587**	**9.2346**	**2.4339**	**0.0541**	**2.4879**		**7,294.0712**	**7,294.0712**	**0.1739**		**7,298.4195**

3.5 Phases All - Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151		2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**		**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.4513	1.8440	19.6016	0.0705	9.1759	0.0569	9.2328	2.4339	0.0524	2.4863		7,026.9544	7,026.9544	0.1620		7,031.0042
Total	**3.4513**	**1.8440**	**19.6016**	**0.0705**	**9.1759**	**0.0569**	**9.2328**	**2.4339**	**0.0524**	**2.4863**		**7,026.9544**	**7,026.9544**	**0.1620**		**7,031.0042**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151	0.0000	2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.4513	1.8440	19.6016	0.0705	9.1759	0.0569	9.2328	2.4339	0.0524	2.4863		7,026.9544	7,026.9544	0.1620		7,031.0042
Total	**3.4513**	**1.8440**	**19.6016**	**0.0705**	**9.1759**	**0.0569**	**9.2328**	**2.4339**	**0.0524**	**2.4863**		**7,026.9544**	**7,026.9544**	**0.1620**		**7,031.0042**

3.5 Phases All - Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151		2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**		**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.3075	1.7211	18.4826	0.0681	9.1759	0.0539	9.2297	2.4339	0.0495	2.4834		6,791.5334	6,791.5334	0.1516		6,795.3235
Total	**3.3075**	**1.7211**	**18.4826**	**0.0681**	**9.1759**	**0.0539**	**9.2297**	**2.4339**	**0.0495**	**2.4834**		**6,791.5334**	**6,791.5334**	**0.1516**		**6,795.3235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151	0.0000	2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.3075	1.7211	18.4826	0.0681	9.1759	0.0539	9.2297	2.4339	0.0495	2.4834		6,791.5334	6,791.5334	0.1516		6,795.3235
Total	**3.3075**	**1.7211**	**18.4826**	**0.0681**	**9.1759**	**0.0539**	**9.2297**	**2.4339**	**0.0495**	**2.4834**		**6,791.5334**	**6,791.5334**	**0.1516**		**6,795.3235**

3.5 Phases All - Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151		2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**		**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.1531	1.6124	17.5098	0.0660	9.1759	0.0499	9.2258	2.4339	0.0459	2.4798		6,584.9385	6,584.9385	0.1428		6,588.5091
Total	**3.1531**	**1.6124**	**17.5098**	**0.0660**	**9.1759**	**0.0499**	**9.2258**	**2.4339**	**0.0459**	**2.4798**		**6,584.9385**	**6,584.9385**	**0.1428**		**6,588.5091**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Archit. Coating	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151	0.0000	2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	3.1531	1.6124	17.5098	0.0660	9.1759	0.0499	9.2258	2.4339	0.0459	2.4798		6,584.9385	6,584.9385	0.1428		6,588.5091
Total	**3.1531**	**1.6124**	**17.5098**	**0.0660**	**9.1759**	**0.0499**	**9.2258**	**2.4339**	**0.0459**	**2.4798**		**6,584.9385**	**6,584.9385**	**0.1428**		**6,588.5091**

3.5 Phases All - Architectural Coating - 2029

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Archit. Coating	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151		2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**		**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	2.9846	1.5124	16.5847	0.0642	9.1759	0.0463	9.2222	2.4339	0.0426	2.4765		6,403.2891	6,403.2891	0.1347		6,406.6562
Total	**2.9846**	**1.5124**	**16.5847**	**0.0642**	**9.1759**	**0.0463**	**9.2222**	**2.4339**	**0.0426**	**2.4765**		**6,403.2891**	**6,403.2891**	**0.1347**		**6,406.6562**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Archit. Coating	41.4639					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.7086	11.4551	18.0914	0.0297		0.5151	0.5151		0.5151	0.5151	0.0000	2,814.4805	2,814.4805	0.1535		2,818.3186
Total	**43.1725**	**11.4551**	**18.0914**	**0.0297**		**0.5151**	**0.5151**		**0.5151**	**0.5151**	**0.0000**	**2,814.4805**	**2,814.4805**	**0.1535**		**2,818.3186**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	2.9846	1.5124	16.5847	0.0642	9.1759	0.0463	9.2222	2.4339	0.0426	2.4765		6,403.2891	6,403.2891	0.1347		6,406.6562
Total	**2.9846**	**1.5124**	**16.5847**	**0.0642**	**9.1759**	**0.0463**	**9.2222**	**2.4339**	**0.0426**	**2.4765**		**6,403.2891**	**6,403.2891**	**0.1347**		**6,406.6562**

3.6 Phase 1 - 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	2.9489	28.8919	32.9416	0.0515		1.5436	1.5436		1.4352	1.4352		4,977.3178	4,977.3178	1.4663		5,013.9764
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9489**	**28.8919**	**32.9416**	**0.0515**		**1.5436**	**1.5436**		**1.4352**	**1.4352**		**4,977.3178**	**4,977.3178**	**1.4663**		**5,013.9764**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2746	0.1766	1.7453	5.3700e-003	1.0748	3.9700e-003	1.0788	0.2752	3.6600e-003	0.2789		535.1833	535.1833	0.0154		535.5677
Total	**0.2746**	**0.1766**	**1.7453**	**5.3700e-003**	**1.0748**	**3.9700e-003**	**1.0788**	**0.2752**	**3.6600e-003**	**0.2789**		**535.1833**	**535.1833**	**0.0154**		**535.5677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9489	28.8919	32.9416	0.0515		1.5436	1.5436		1.4352	1.4352	0.0000	4,977.3178	4,977.3178	1.4663		5,013.9764
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.9489**	**28.8919**	**32.9416**	**0.0515**		**1.5436**	**1.5436**		**1.4352**	**1.4352**	**0.0000**	**4,977.3178**	**4,977.3178**	**1.4663**		**5,013.9764**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2746	0.1766	1.7453	5.3700e-003	1.0748	3.9700e-003	1.0788	0.2752	3.6600e-003	0.2789		535.1833	535.1833	0.0154		535.5677
Total	**0.2746**	**0.1766**	**1.7453**	**5.3700e-003**	**1.0748**	**3.9700e-003**	**1.0788**	**0.2752**	**3.6600e-003**	**0.2789**		**535.1833**	**535.1833**	**0.0154**		**535.5677**

3.7 Phase 2 - Site Preparation - 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					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671		7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**		**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1301	0.0805	0.8097	2.5900e-003	0.2875	1.9400e-003	0.2895	0.0763	1.7900e-003	0.0781		257.7840	257.7840	7.0400e-003		257.9599
Total	**0.1301**	**0.0805**	**0.8097**	**2.5900e-003**	**0.2875**	**1.9400e-003**	**0.2895**	**0.0763**	**1.7900e-003**	**0.0781**		**257.7840**	**257.7840**	**7.0400e-003**		**257.9599**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671	0.0000	7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**	**0.0000**	**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1301	0.0805	0.8097	2.5900e-003	0.2875	1.9400e-003	0.2895	0.0763	1.7900e-003	0.0781		257.7840	257.7840	7.0400e-003		257.9599
Total	**0.1301**	**0.0805**	**0.8097**	**2.5900e-003**	**0.2875**	**1.9400e-003**	**0.2895**	**0.0763**	**1.7900e-003**	**0.0781**		**257.7840**	**257.7840**	**7.0400e-003**		**257.9599**

3.8 Phase 2 - Grading - 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					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082		12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**		**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	**0.1487**	**0.0920**	**0.9254**	**2.9600e-003**	**0.3286**	**2.2200e-003**	**0.3308**	**0.0872**	**2.0500e-003**	**0.0892**		**294.6102**	**294.6102**	**8.0400e-003**		**294.8113**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082	0.0000	12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**	**0.0000**	**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	**0.1487**	**0.0920**	**0.9254**	**2.9600e-003**	**0.3286**	**2.2200e-003**	**0.3308**	**0.0872**	**2.0500e-003**	**0.0892**		**294.6102**	**294.6102**	**8.0400e-003**		**294.8113**

3.9 Phase 2 - 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	3.4125	31.2313	32.7268	0.0539		1.6180	1.6180		1.5223	1.5223		5,108.6672	5,108.6672	1.2239		5,139.2644
Total	**3.4125**	**31.2313**	**32.7268**	**0.0539**		**1.6180**	**1.6180**		**1.5223**	**1.5223**		**5,108.6672**	**5,108.6672**	**1.2239**		**5,139.2644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2282	136.7636	39.0128	0.3722	9.6535	0.2735	9.9269	2.7789	0.2615	3.0405		40,085.2333	40,085.2333	3.0523		40,161.5400
Worker	20.7601	12.8433	129.2088	0.4127	45.8795	0.3100	46.1895	12.1694	0.2855	12.4549		41,134.9540	41,134.9540	1.1231		41,163.0320
Total	**24.9882**	**149.6069**	**168.2215**	**0.7848**	**55.5329**	**0.5835**	**56.1164**	**14.9483**	**0.5471**	**15.4954**		**81,220.1873**	**81,220.1873**	**4.1754**		**81,324.5720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4125	31.2313	32.7268	0.0539		1.6180	1.6180		1.5223	1.5223	0.0000	5,108.6672	5,108.6672	1.2239		5,139.2644
Total	**3.4125**	**31.2313**	**32.7268**	**0.0539**		**1.6180**	**1.6180**		**1.5223**	**1.5223**	**0.0000**	**5,108.6672**	**5,108.6672**	**1.2239**		**5,139.2644**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	4.2282	136.7636	39.0128	0.3722	9.6535	0.2735	9.9269	2.7789	0.2615	3.0405		40,085.2333	40,085.2333	3.0523		40,161.5400
Worker	20.7601	12.8433	129.2088	0.4127	45.8795	0.3100	46.1895	12.1694	0.2855	12.4549		41,134.9540	41,134.9540	1.1231		41,163.0320
Total	**24.9882**	**149.6069**	**168.2215**	**0.7848**	**55.5329**	**0.5835**	**56.1164**	**14.9483**	**0.5471**	**15.4954**		**81,220.1873**	**81,220.1873**	**4.1754**		**81,324.5720**

3.9 Phase 2 - Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1455	28.7698	32.4880	0.0539		1.3995	1.3995		1.3169	1.3169		5,110.4199	5,110.4199	1.2157		5,140.8121
Total	**3.1455**	**28.7698**	**32.4880**	**0.0539**		**1.3995**	**1.3995**		**1.3169**	**1.3169**		**5,110.4199**	**5,110.4199**	**1.2157**		**5,140.8121**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2639	107.5505	35.2391	0.3621	9.6534	0.1344	9.7878	2.7789	0.1285	2.9074		39,082.2859	39,082.2859	2.7783		39,151.7431
Worker	19.7124	11.7252	119.7636	0.3968	45.8795	0.3039	46.1834	12.1694	0.2798	12.4492		39,563.9280	39,563.9280	1.0265		39,589.5910
Total	**22.9763**	**119.2757**	**155.0027**	**0.7589**	**55.5328**	**0.4383**	**55.9712**	**14.9483**	**0.4083**	**15.3566**		**78,646.2139**	**78,646.2139**	**3.8048**		**78,741.3341**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1455	28.7698	32.4880	0.0539		1.3995	1.3995		1.3169	1.3169	0.0000	5,110.4198	5,110.4198	1.2157		5,140.8121
Total	**3.1455**	**28.7698**	**32.4880**	**0.0539**		**1.3995**	**1.3995**		**1.3169**	**1.3169**	**0.0000**	**5,110.4198**	**5,110.4198**	**1.2157**		**5,140.8121**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.2639	107.5505	35.2391	0.3621	9.6534	0.1344	9.7878	2.7789	0.1285	2.9074		39,082.2859	39,082.2859	2.7783		39,151.7431
Worker	19.7124	11.7252	119.7636	0.3968	45.8795	0.3039	46.1834	12.1694	0.2798	12.4492		39,563.9280	39,563.9280	1.0265		39,589.5910
Total	**22.9763**	**119.2757**	**155.0027**	**0.7589**	**55.5328**	**0.4383**	**55.9712**	**14.9483**	**0.4083**	**15.3566**		**78,646.2139**	**78,646.2139**	**3.8048**		**78,741.3341**

3.10 Phase 2 - Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4488	22.9893	32.7907	0.0516		1.1620	1.1620		1.0804	1.0804		4,978.0644	4,978.0644	1.4616		5,014.6052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4488**	**22.9893**	**32.7907**	**0.0516**		**1.1620**	**1.1620**		**1.0804**	**1.0804**		**4,978.0644**	**4,978.0644**	**1.4616**		**5,014.6052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2471	0.1470	1.5011	4.9700e-003	1.0748	3.8100e-003	1.0786	0.2752	3.5100e-003	0.2787		495.8773	495.8773	0.0129		496.1990
Total	**0.2471**	**0.1470**	**1.5011**	**4.9700e-003**	**1.0748**	**3.8100e-003**	**1.0786**	**0.2752**	**3.5100e-003**	**0.2787**		**495.8773**	**495.8773**	**0.0129**		**496.1990**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	2.4488	22.9893	32.7907	0.0516		1.1620	1.1620		1.0804	1.0804	0.0000	4,978.0644	4,978.0644	1.4616		5,014.6052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.4488**	**22.9893**	**32.7907**	**0.0516**		**1.1620**	**1.1620**		**1.0804**	**1.0804**	**0.0000**	**4,978.0644**	**4,978.0644**	**1.4616**		**5,014.6052**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2471	0.1470	1.5011	4.9700e-003	1.0748	3.8100e-003	1.0786	0.2752	3.5100e-003	0.2787		495.8773	495.8773	0.0129		496.1990
Total	**0.2471**	**0.1470**	**1.5011**	**4.9700e-003**	**1.0748**	**3.8100e-003**	**1.0786**	**0.2752**	**3.5100e-003**	**0.2787**		**495.8773**	**495.8773**	**0.0129**		**496.1990**

3.11 Phase 3 - Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	5.3218	54.3520	36.6713	0.0762		2.4587	2.4587		2.2620	2.2620		7,376.0199	7,376.0199	2.3856		7,435.6588
Total	**5.3218**	**54.3520**	**36.6713**	**0.0762**	**36.1325**	**2.4587**	**38.5912**	**19.8614**	**2.2620**	**22.1234**		**7,376.0199**	**7,376.0199**	**2.3856**		**7,435.6588**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1177	0.0674	0.7006	2.3900e-003	0.2875	1.8700e-003	0.2894	0.0763	1.7200e-003	0.0780		238.1792	238.1792	5.9100e-003		238.3269
Total	**0.1177**	**0.0674**	**0.7006**	**2.3900e-003**	**0.2875**	**1.8700e-003**	**0.2894**	**0.0763**	**1.7200e-003**	**0.0780**		**238.1792**	**238.1792**	**5.9100e-003**		**238.3269**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	5.3218	54.3520	36.6713	0.0762		2.4587	2.4587		2.2620	2.2620	0.0000	7,376.0199	7,376.0199	2.3856		7,435.6588
Total	**5.3218**	**54.3520**	**36.6713**	**0.0762**	**36.1325**	**2.4587**	**38.5912**	**19.8614**	**2.2620**	**22.1234**	**0.0000**	**7,376.0199**	**7,376.0199**	**2.3856**		**7,435.6588**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1177	0.0674	0.7006	2.3900e-003	0.2875	1.8700e-003	0.2894	0.0763	1.7200e-003	0.0780		238.1792	238.1792	5.9100e-003		238.3269
Total	**0.1177**	**0.0674**	**0.7006**	**2.3900e-003**	**0.2875**	**1.8700e-003**	**0.2894**	**0.0763**	**1.7200e-003**	**0.0780**		**238.1792**	**238.1792**	**5.9100e-003**		**238.3269**

3.12 Phase 3 - Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.4363	64.7539	55.4456	0.1241		2.6708	2.6708		2.4571	2.4571		12,019.4974	12,019.4974	3.8874		12,116.6811
Total	**6.4363**	**64.7539**	**55.4456**	**0.1241**	**17.3467**	**2.6708**	**20.0175**	**7.1930**	**2.4571**	**9.6501**		**12,019.4974**	**12,019.4974**	**3.8874**		**12,116.6811**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735
Total	**0.1345**	**0.0770**	**0.8007**	**2.7300e-003**	**0.3286**	**2.1400e-003**	**0.3307**	**0.0872**	**1.9700e-003**	**0.0891**		**272.2048**	**272.2048**	**6.7500e-003**		**272.3735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.4363	64.7539	55.4456	0.1241		2.6708	2.6708		2.4571	2.4571	0.0000	12,019.4973	12,019.4973	3.8874		12,116.6811
Total	**6.4363**	**64.7539**	**55.4456**	**0.1241**	**17.3467**	**2.6708**	**20.0175**	**7.1930**	**2.4571**	**9.6501**	**0.0000**	**12,019.4973**	**12,019.4973**	**3.8874**		**12,116.6811**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735
Total	**0.1345**	**0.0770**	**0.8007**	**2.7300e-003**	**0.3286**	**2.1400e-003**	**0.3307**	**0.0872**	**1.9700e-003**	**0.0891**		**272.2048**	**272.2048**	**6.7500e-003**		**272.3735**

3.13 Phase 3 - Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538		5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**		**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1468	106.0514	34.1189	0.3593	9.6534	0.1305	9.7839	2.7789	0.1247	2.9036		38,838.0904	38,838.0904	2.7420		38,906.6407
Worker	18.7811	10.7537	111.8016	0.3812	45.8795	0.2984	46.1778	12.1694	0.2747	12.4440		38,006.5915	38,006.5915	0.9426		38,030.1562
Total	**21.9279**	**116.8051**	**145.9205**	**0.7404**	**55.5328**	**0.4288**	**55.9617**	**14.9483**	**0.3994**	**15.3477**		**76,844.6818**	**76,844.6818**	**3.6846**		**76,936.7969**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538	0.0000	5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**	**0.0000**	**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.1468	106.0514	34.1189	0.3593	9.6534	0.1305	9.7839	2.7789	0.1247	2.9036		38,838.0904	38,838.0904	2.7420		38,906.6407
Worker	18.7811	10.7537	111.8016	0.3812	45.8795	0.2984	46.1778	12.1694	0.2747	12.4440		38,006.5915	38,006.5915	0.9426		38,030.1562
Total	**21.9279**	**116.8051**	**145.9205**	**0.7404**	**55.5328**	**0.4288**	**55.9617**	**14.9483**	**0.3994**	**15.3477**		**76,844.6818**	**76,844.6818**	**3.6846**		**76,936.7969**

3.13 Phase 3 - Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.0527	104.5168	33.4212	0.3566	9.6534	0.1262	9.7796	2.7789	0.1206	2.8995		38,605.6242	38,605.6242	2.7102		38,673.3791
Worker	17.9672	9.9138	104.3230	0.3657	45.8795	0.2937	46.1731	12.1694	0.2703	12.4397		36,470.3561	36,470.3561	0.8697		36,492.0976
Total	**21.0199**	**114.4306**	**137.7442**	**0.7223**	**55.5328**	**0.4199**	**55.9527**	**14.9483**	**0.3909**	**15.3392**		**75,075.9803**	**75,075.9803**	**3.5799**		**75,165.4768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	3.0527	104.5168	33.4212	0.3566	9.6534	0.1262	9.7796	2.7789	0.1206	2.8995		38,605.6242	38,605.6242	2.7102		38,673.3791
Worker	17.9672	9.9138	104.3230	0.3657	45.8795	0.2937	46.1731	12.1694	0.2703	12.4397		36,470.3561	36,470.3561	0.8697		36,492.0976
Total	**21.0199**	**114.4306**	**137.7442**	**0.7223**	**55.5328**	**0.4199**	**55.9527**	**14.9483**	**0.3909**	**15.3392**		**75,075.9803**	**75,075.9803**	**3.5799**		**75,165.4768**

3.14 Phase 3 - Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731		4,976.3864	4,976.3864	1.4581		5,012.8393
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**		**4,976.3864**	**4,976.3864**	**1.4581**		**5,012.8393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2252	0.1243	1.3075	4.5800e-003	1.0748	3.6800e-003	1.0785	0.2752	3.3900e-003	0.2786		457.1038	457.1038	0.0109		457.3763
Total	**0.2252**	**0.1243**	**1.3075**	**4.5800e-003**	**1.0748**	**3.6800e-003**	**1.0785**	**0.2752**	**3.3900e-003**	**0.2786**		**457.1038**	**457.1038**	**0.0109**		**457.3763**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731	0.0000	4,976.3864	4,976.3864	1.4581		5,012.8393
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**	**0.0000**	**4,976.3864**	**4,976.3864**	**1.4581**		**5,012.8393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2252	0.1243	1.3075	4.5800e-003	1.0748	3.6800e-003	1.0785	0.2752	3.3900e-003	0.2786		457.1038	457.1038	0.0109		457.3763
Total	**0.2252**	**0.1243**	**1.3075**	**4.5800e-003**	**1.0748**	**3.6800e-003**	**1.0785**	**0.2752**	**3.3900e-003**	**0.2786**		**457.1038**	**457.1038**	**0.0109**		**457.3763**

3.15 Phase 4 - Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	4.9454	50.4678	35.8236	0.0762		2.1736	2.1736		1.9997	1.9997		7,378.2075	7,378.2075	2.3863		7,437.8640
Total	**4.9454**	**50.4678**	**35.8236**	**0.0762**	**36.1325**	**2.1736**	**38.3061**	**19.8614**	**1.9997**	**21.8611**		**7,378.2075**	**7,378.2075**	**2.3863**		**7,437.8640**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1081	0.0578	0.6142	2.2100e-003	0.2875	1.7800e-003	0.2893	0.0763	1.6400e-003	0.0779		220.1821	220.1821	5.0800e-003		220.3090
Total	**0.1081**	**0.0578**	**0.6142**	**2.2100e-003**	**0.2875**	**1.7800e-003**	**0.2893**	**0.0763**	**1.6400e-003**	**0.0779**		**220.1821**	**220.1821**	**5.0800e-003**		**220.3090**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	4.9454	50.4678	35.8236	0.0762		2.1736	2.1736		1.9997	1.9997	0.0000	7,378.2075	7,378.2075	2.3863		7,437.8640
Total	**4.9454**	**50.4678**	**35.8236**	**0.0762**	**36.1325**	**2.1736**	**38.3061**	**19.8614**	**1.9997**	**21.8611**	**0.0000**	**7,378.2075**	**7,378.2075**	**2.3863**		**7,437.8640**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1081	0.0578	0.6142	2.2100e-003	0.2875	1.7800e-003	0.2893	0.0763	1.6400e-003	0.0779		220.1821	220.1821	5.0800e-003		220.3090
Total	**0.1081**	**0.0578**	**0.6142**	**2.2100e-003**	**0.2875**	**1.7800e-003**	**0.2893**	**0.0763**	**1.6400e-003**	**0.0779**		**220.1821**	**220.1821**	**5.0800e-003**		**220.3090**

3.16 Phase 4 - Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	5.8025	55.8858	52.6622	0.1241		2.2618	2.2618		2.0808	2.0808		12,016.5629	12,016.5629	3.8864		12,113.7229
Total	**5.8025**	**55.8858**	**52.6622**	**0.1241**	**17.3467**	**2.2618**	**19.6085**	**7.1930**	**2.0808**	**9.2738**		**12,016.5629**	**12,016.5629**	**3.8864**		**12,113.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1236	0.0660	0.7019	2.5200e-003	0.3286	2.0400e-003	0.3306	0.0872	1.8800e-003	0.0890		251.6367	251.6367	5.8000e-003		251.7817
Total	**0.1236**	**0.0660**	**0.7019**	**2.5200e-003**	**0.3286**	**2.0400e-003**	**0.3306**	**0.0872**	**1.8800e-003**	**0.0890**		**251.6367**	**251.6367**	**5.8000e-003**		**251.7817**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	5.8025	55.8858	52.6622	0.1241		2.2618	2.2618		2.0808	2.0808	0.0000	12,016.5629	12,016.5629	3.8864		12,113.7229
Total	**5.8025**	**55.8858**	**52.6622**	**0.1241**	**17.3467**	**2.2618**	**19.6085**	**7.1930**	**2.0808**	**9.2738**	**0.0000**	**12,016.5629**	**12,016.5629**	**3.8864**		**12,113.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1236	0.0660	0.7019	2.5200e-003	0.3286	2.0400e-003	0.3306	0.0872	1.8800e-003	0.0890		251.6367	251.6367	5.8000e-003		251.7817
Total	**0.1236**	**0.0660**	**0.7019**	**2.5200e-003**	**0.3286**	**2.0400e-003**	**0.3306**	**0.0872**	**1.8800e-003**	**0.0890**		**251.6367**	**251.6367**	**5.8000e-003**		**251.7817**

3.17 Phase 4 - Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9736	103.0306	32.9299	0.3542	9.6533	0.1222	9.7755	2.7789	0.1168	2.8957		38,388.4127	38,388.4127	2.6799		38,455.4090
Worker	17.2563	9.2200	98.0079	0.3523	45.8795	0.2846	46.1640	12.1694	0.2619	12.4313		35,134.7720	35,134.7720	0.8100		35,155.0212
Total	**20.2299**	**112.2507**	**130.9378**	**0.7064**	**55.5328**	**0.4067**	**55.9395**	**14.9483**	**0.3786**	**15.3269**		**73,523.1847**	**73,523.1847**	**3.4898**		**73,610.4302**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9736	103.0306	32.9299	0.3542	9.6533	0.1222	9.7755	2.7789	0.1168	2.8957		38,388.4127	38,388.4127	2.6799		38,455.4090
Worker	17.2563	9.2200	98.0079	0.3523	45.8795	0.2846	46.1640	12.1694	0.2619	12.4313		35,134.7720	35,134.7720	0.8100		35,155.0212
Total	**20.2299**	**112.2507**	**130.9378**	**0.7064**	**55.5328**	**0.4067**	**55.9395**	**14.9483**	**0.3786**	**15.3269**		**73,523.1847**	**73,523.1847**	**3.4898**		**73,610.4302**

3.17 Phase 4 - Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9071	101.6027	32.5143	0.3519	9.6533	0.1190	9.7723	2.7789	0.1137	2.8926		38,188.6460	38,188.6460	2.6537		38,254.9876
Worker	16.5373	8.6057	92.4129	0.3404	45.8795	0.2692	46.1487	12.1694	0.2477	12.4171		33,957.6670	33,957.6670	0.7580		33,976.6176
Total	**19.4445**	**110.2084**	**124.9272**	**0.6923**	**55.5328**	**0.3882**	**55.9210**	**14.9483**	**0.3615**	**15.3097**		**72,146.3130**	**72,146.3130**	**3.4117**		**72,231.6052**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.9071	101.6027	32.5143	0.3519	9.6533	0.1190	9.7723	2.7789	0.1137	2.8926		38,188.6460	38,188.6460	2.6537		38,254.9876
Worker	16.5373	8.6057	92.4129	0.3404	45.8795	0.2692	46.1487	12.1694	0.2477	12.4171		33,957.6670	33,957.6670	0.7580		33,976.6176
Total	**19.4445**	**110.2084**	**124.9272**	**0.6923**	**55.5328**	**0.3882**	**55.9210**	**14.9483**	**0.3615**	**15.3097**		**72,146.3130**	**72,146.3130**	**3.4117**		**72,231.6052**

3.18 Phase 4 - Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731		4,976.3864	4,976.3864	1.4581		5,012.8393
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**		**4,976.3864**	**4,976.3864**	**1.4581**		**5,012.8393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2073	0.1079	1.1583	4.2700e-003	1.0748	3.3700e-003	1.0782	0.2752	3.1000e-003	0.2783		425.6109	425.6109	9.5000e-003		425.8484
Total	**0.2073**	**0.1079**	**1.1583**	**4.2700e-003**	**1.0748**	**3.3700e-003**	**1.0782**	**0.2752**	**3.1000e-003**	**0.2783**		**425.6109**	**425.6109**	**9.5000e-003**		**425.8484**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731	0.0000	4,976.3864	4,976.3864	1.4581		5,012.8393
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**	**0.0000**	**4,976.3864**	**4,976.3864**	**1.4581**		**5,012.8393**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2073	0.1079	1.1583	4.2700e-003	1.0748	3.3700e-003	1.0782	0.2752	3.1000e-003	0.2783		425.6109	425.6109	9.5000e-003		425.8484
Total	**0.2073**	**0.1079**	**1.1583**	**4.2700e-003**	**1.0748**	**3.3700e-003**	**1.0782**	**0.2752**	**3.1000e-003**	**0.2783**		**425.6109**	**425.6109**	**9.5000e-003**		**425.8484**

3.19 Phase 5 - Site Preparation - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	4.9454	50.4678	35.8236	0.0762		2.1736	2.1736		1.9997	1.9997		7,378.2075	7,378.2075	2.3863		7,437.8640
Total	**4.9454**	**50.4678**	**35.8236**	**0.0762**	**36.1325**	**2.1736**	**38.3061**	**19.8614**	**1.9997**	**21.8611**		**7,378.2075**	**7,378.2075**	**2.3863**		**7,437.8640**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0988	0.0505	0.5487	2.0700e-003	0.2875	1.5600e-003	0.2891	0.0763	1.4400e-003	0.0777		206.3320	206.3320	4.4800e-003		206.4439
Total	**0.0988**	**0.0505**	**0.5487**	**2.0700e-003**	**0.2875**	**1.5600e-003**	**0.2891**	**0.0763**	**1.4400e-003**	**0.0777**		**206.3320**	**206.3320**	**4.4800e-003**		**206.4439**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	4.9454	50.4678	35.8236	0.0762		2.1736	2.1736		1.9997	1.9997	0.0000	7,378.2075	7,378.2075	2.3863		7,437.8640
Total	**4.9454**	**50.4678**	**35.8236**	**0.0762**	**36.1325**	**2.1736**	**38.3061**	**19.8614**	**1.9997**	**21.8611**	**0.0000**	**7,378.2075**	**7,378.2075**	**2.3863**		**7,437.8640**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0988	0.0505	0.5487	2.0700e-003	0.2875	1.5600e-003	0.2891	0.0763	1.4400e-003	0.0777		206.3320	206.3320	4.4800e-003		206.4439
Total	**0.0988**	**0.0505**	**0.5487**	**2.0700e-003**	**0.2875**	**1.5600e-003**	**0.2891**	**0.0763**	**1.4400e-003**	**0.0777**		**206.3320**	**206.3320**	**4.4800e-003**		**206.4439**

3.20 Phase 5 - Grading - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	5.8025	55.8858	52.6622	0.1241		2.2618	2.2618		2.0808	2.0808		12,016.5629	12,016.5629	3.8864		12,113.7229
Total	**5.8025**	**55.8858**	**52.6622**	**0.1241**	**17.3467**	**2.2618**	**19.6085**	**7.1930**	**2.0808**	**9.2738**		**12,016.5629**	**12,016.5629**	**3.8864**		**12,113.7229**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1129	0.0577	0.6270	2.3600e-003	0.3286	1.7900e-003	0.3304	0.0872	1.6400e-003	0.0888		235.8080	235.8080	5.1100e-003		235.9359
Total	**0.1129**	**0.0577**	**0.6270**	**2.3600e-003**	**0.3286**	**1.7900e-003**	**0.3304**	**0.0872**	**1.6400e-003**	**0.0888**		**235.8080**	**235.8080**	**5.1100e-003**		**235.9359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	5.8025	55.8858	52.6622	0.1241		2.2618	2.2618		2.0808	2.0808	0.0000	12,016.5629	12,016.5629	3.8864		12,113.7229
Total	**5.8025**	**55.8858**	**52.6622**	**0.1241**	**17.3467**	**2.2618**	**19.6085**	**7.1930**	**2.0808**	**9.2738**	**0.0000**	**12,016.5629**	**12,016.5629**	**3.8864**		**12,113.7229**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1129	0.0577	0.6270	2.3600e-003	0.3286	1.7900e-003	0.3304	0.0872	1.6400e-003	0.0888		235.8080	235.8080	5.1100e-003		235.9359
Total	**0.1129**	**0.0577**	**0.6270**	**2.3600e-003**	**0.3286**	**1.7900e-003**	**0.3304**	**0.0872**	**1.6400e-003**	**0.0888**		**235.8080**	**235.8080**	**5.1100e-003**		**235.9359**

3.21 Phase 5 - Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8549	100.4180	32.2927	0.3500	9.6533	0.1163	9.7696	2.7789	0.1112	2.8901		38,022.3165	38,022.3165	2.6296		38,088.0566
Worker	15.7655	8.0622	87.5492	0.3300	45.8795	0.2493	46.1288	12.1694	0.2294	12.3988		32,924.6924	32,924.6924	0.7141		32,942.5453
Total	**18.6205**	**108.4802**	**119.8419**	**0.6800**	**55.5328**	**0.3656**	**55.8984**	**14.9483**	**0.3405**	**15.2888**		**70,947.0089**	**70,947.0089**	**3.3437**		**71,030.6019**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8549	100.4180	32.2927	0.3500	9.6533	0.1163	9.7696	2.7789	0.1112	2.8901		38,022.3165	38,022.3165	2.6296		38,088.0566
Worker	15.7655	8.0622	87.5492	0.3300	45.8795	0.2493	46.1288	12.1694	0.2294	12.3988		32,924.6924	32,924.6924	0.7141		32,942.5453
Total	**18.6205**	**108.4802**	**119.8419**	**0.6800**	**55.5328**	**0.3656**	**55.8984**	**14.9483**	**0.3405**	**15.2888**		**70,947.0089**	**70,947.0089**	**3.3437**		**71,030.6019**

3.21 Phase 5 - Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8048	99.1964	32.0461	0.3482	9.6533	0.1132	9.7665	2.7789	0.1082	2.8871		37,859.5475	37,859.5475	2.6118		37,924.8429
Worker	14.9232	7.5618	82.9237	0.3209	45.8795	0.2315	46.1109	12.1694	0.2129	12.3823		32,016.4455	32,016.4455	0.6734		32,033.2809
Total	**17.7280**	**106.7581**	**114.9697**	**0.6691**	**55.5327**	**0.3447**	**55.8774**	**14.9483**	**0.3211**	**15.2694**		**69,875.9930**	**69,875.9930**	**3.2852**		**69,958.1237**

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	lb/day										lb/day					
Off-Road	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.8048	99.1964	32.0461	0.3482	9.6533	0.1132	9.7665	2.7789	0.1082	2.8871		37,859.5475	37,859.5475	2.6118		37,924.8429
Worker	14.9232	7.5618	82.9237	0.3209	45.8795	0.2315	46.1109	12.1694	0.2129	12.3823		32,016.4455	32,016.4455	0.6734		32,033.2809
Total	**17.7280**	**106.7581**	**114.9697**	**0.6691**	**55.5327**	**0.3447**	**55.8774**	**14.9483**	**0.3211**	**15.2694**		**69,875.9930**	**69,875.9930**	**3.2852**		**69,958.1237**

3.22 Phase 5 - Paving - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731		4,976.3864	4,976.3864	1.4581		5,012.8393
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**		**4,976.3864**	**4,976.3864**	**1.4581**		**5,012.8393**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1870	0.0948	1.0393	4.0200e-003	1.0748	2.9000e-003	1.0777	0.2752	2.6700e-003	0.2779		401.2804	401.2804	8.4400e-003		401.4914
Total	**0.1870**	**0.0948**	**1.0393**	**4.0200e-003**	**1.0748**	**2.9000e-003**	**1.0777**	**0.2752**	**2.6700e-003**	**0.2779**		**401.2804**	**401.2804**	**8.4400e-003**		**401.4914**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1720	19.4543	32.7742	0.0515		0.9401	0.9401		0.8731	0.8731	0.0000	4,976.386 4	4,976.3864	1.4581		5,012.839 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1720**	**19.4543**	**32.7742**	**0.0515**		**0.9401**	**0.9401**		**0.8731**	**0.8731**	**0.0000**	**4,976.386 4**	**4,976.3864**	**1.4581**		**5,012.839 3**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1870	0.0948	1.0393	4.0200e-003	1.0748	2.9000e-003	1.0777	0.2752	2.6700e-003	0.2779		401.2804	401.2804	8.4400e-003		401.4914
Total	**0.1870**	**0.0948**	**1.0393**	**4.0200e-003**	**1.0748**	**2.9000e-003**	**1.0777**	**0.2752**	**2.6700e-003**	**0.2779**		**401.2804**	**401.2804**	**8.4400e-003**		**401.4914**

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