

Appendix E

Greenhouse Gas Emissions Technical Report

Kearny Mesa Community Plan Update

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December 2019

Prepared for:

**City of San Diego
Planning Department**
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San Diego, CA 92123

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APS	alternative planning strategy
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBSC	California Building Standards Commission
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEUS	California Commercial End Use Survey
CFCs	chlorofluorocarbons
CH ₄	methane
CPU	Community Plan Amendment
CO ₂	carbon dioxide
CO ₂ e	CO ₂ -equivalent
EO	Executive Order
EPIC	University of San Diego School of Law, Energy Policy Initiative Center
°F	Fahrenheit (degrees)
GHG	greenhouse gas
GWP	Global Warming Potential
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
I-	Interstate
IPCC	United Nations Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LOS	level of service
MCAS	Marine Corps Air Station
MMT	million metric tons
mpg	miles per gallon
MPOs	Metropolitan Planning Organizations
MT	metric ton

ACRONYMS AND ABBREVIATIONS (cont.)

N ₂ O	nitrous oxide
NASA	National Aeronautics and Space Administration
NHTSA	National Highway Traffic Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NO _x	nitrogen oxides
PEIR	Program Environmental Impact Report
PFCs	perfluorocarbons
ppm	parts per million
RASS	Residential Appliance Saturation Survey
RCP	Regional Comprehensive Plan
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SF	square feet/foot
SF ₆	sulfur hexafluoride
SR	State Route
TIS	Transportation Impact Study
TPA	Transit Priority Area
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compound

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EXECUTIVE SUMMARY

Kearny Mesa is located in the central portion of the City of San Diego (City) in San Diego County. The Kearny Mesa Community Plan Update (CPU) is a comprehensive update to the Kearny Mesa Community Plan, which was adopted in 1992 and most recently amended in January 2018 (City 2018). The purpose of the CPU is to continue to guide the growth and development of Kearny Mesa. The proposed CPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network; urban design guidelines; recommendations to preserve and enhance natural open space and historic and cultural resources; and prioritization and provision of public facilities within the Kearny Mesa community. This report presents an assessment of potential construction and operational greenhouse gas (GHG) emission impacts associated with the CPU.

For the purposes of determining the increase in GHG emissions associated with the CPU, an inventory was developed based on the land use designations associated with the adopted Kearny Mesa Community Plans (herein referred to as Community Plan) using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. Emissions from the proposed CPU were then compared with those associated with the adopted Community Plan. Emissions associated with buildout of the adopted Community Plan were estimated to be approximately 628,265 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year. Using CalEEMod, the CPU emissions would total approximately 897,995 MT CO₂e. This represents an increase of approximately 269,730 MT CO₂e per year when compared to the inventory prepared for the adopted Community Plan. The increase in emissions occurs because CPU would include an additional 19,944 residential dwelling units and 10,452,019 square feet (SF) of commercial and retail space over the adopted Community Plan. Although the CPU would increase aggregated GHG emissions over those of the adopted Community Plan at buildout, this increase in GHG is a direct result of the implementation of the City's Climate Action Plan Strategies and the General Plan's City of Villages Strategy. Increasing residential and commercial density in transit corridors and Community Villages within a Transit Priority Area (TPA) would support the City of San Diego in achieving the GHG emissions reduction targets of the Climate Action Plan (CAP), and thus, impacts associated with GHG emissions would be less than significant.

With regard to the CPU's consistency with local and State plans and policies aimed at reducing GHG emissions, the proposed CPU would develop compact, walkable communities close to transit connections and consistent with smart growth principles. The CPU supports the multi-modal strategy of the SANDAG Regional Plan through improvements to increase bicycle, pedestrian, and transit access. Policies contained within the proposed CPU Vision and Mobility sections would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. The proposed CPU incorporates goals and policies intended to support the General Plan and CAP policies and thus, impacts associated with GHG emissions would be less than significant.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report analyzes potential greenhouse gas (GHG) emission impacts associated with the implementation of the Kearny Mesa Community Plan Update (CPU). The report includes an evaluation of existing conditions in the CPU area and an evaluation of GHG impacts. The analysis follows the guidelines within the City of San Diego's (City) *California Environmental Quality Act (CEQA) Significance Determination Thresholds* (City 2016).

1.2 PROJECT LOCATION

Kearny Mesa is located in the central portion of the City in San Diego County (Figure 1, *Regional Location*). The Kearny Mesa CPU area is bounded by State Route 52 (SR 52) on the north and Interstate 805 (I-805) and Interstate 15 (I-15) on the west and east, respectively, and encompasses approximately 4,423 acres (Figure 2, *Project Vicinity*). Marine Corps Air Station (MCAS) Miramar is situated to the north of the CPU area, the community of Tierrasanta to the east, the communities of Serra Mesa and Mission Valley to the south, and the communities of Clairemont Mesa and Linda Vista to the west.

1.3 PROJECT DESCRIPTION

The Kearny Mesa CPU is a comprehensive update to the Kearny Mesa Community Plan, which was adopted in 1992 and most recently amended in January 2018 (City 2018). The purpose of the CPU is to continue to guide the growth and development of Kearny Mesa. The proposed CPU provides community-specific policies that further implement the General Plan with respect to the distribution and arrangement of land uses and the local street and transit network; urban design guidelines; recommendations to preserve and enhance natural open space and historic and cultural resources; and prioritization and provision of public facilities within the Kearny Mesa community.

Within the boundaries of the CPU area are three locally approved planning documents: the StoneCrest Specific Plan, the New Century Center Master Plan, and the Montgomery-Gibbs Executive Airport Master Plan (refer to Figure 2). The StoneCrest Specific Plan was adopted by City Council in February 1988 with amendments approved in 1996 (City 1996). The New Century Center Master Plan was approved by City Council in November 2002 (City 2002). The Stonecrest Specific Plan is proposed to be rescinded as part of the proposed CPU. An update to the Montgomery-Gibbs Executive Airport Master Plan is being prepared by the City's Real Estate Assets Department - Airports Division.

1.4 REGULATORY REQUIREMENTS APPLICABLE TO NEW BUILDING CONSTRUCTION

1.4.1 Energy Efficiencies

New development under the CPU would be designed to at a minimum meet current 2016 Title 24 energy efficiency standards. In accordance with the requirements of Title 24, new development under the CPU would:

- Install enhanced ceiling, attic, and wall insulation,
- Install high efficiency window glazing,
- Have the installation of all heating, ventilation, and air conditioning (HVAC) units verified by a third party, and
- Include roof anchors and pre-wiring to allow for the installation of photovoltaic systems.

1.4.2 Water Conservation

In accordance with 2016 California Green Building Standards Code (CALGreen) mandatory measures for new development under the CPU would:

- Reduce potable water use by 20 percent,
- Install low-flow water fixtures,
- Reduce wastewater generation by 20 percent,
- Install low-flow bathroom fixtures, and
- Install weather-based smart irrigation control systems.

1.4.3 Solid Waste Reduction

- In accordance with Assembly Bill (AB) 341, at least 75 percent of operational waste would be diverted from landfills through reuse and recycling.
- Provide areas for storage and collection of recyclables and yard waste in accordance with 2016 CALGreen.

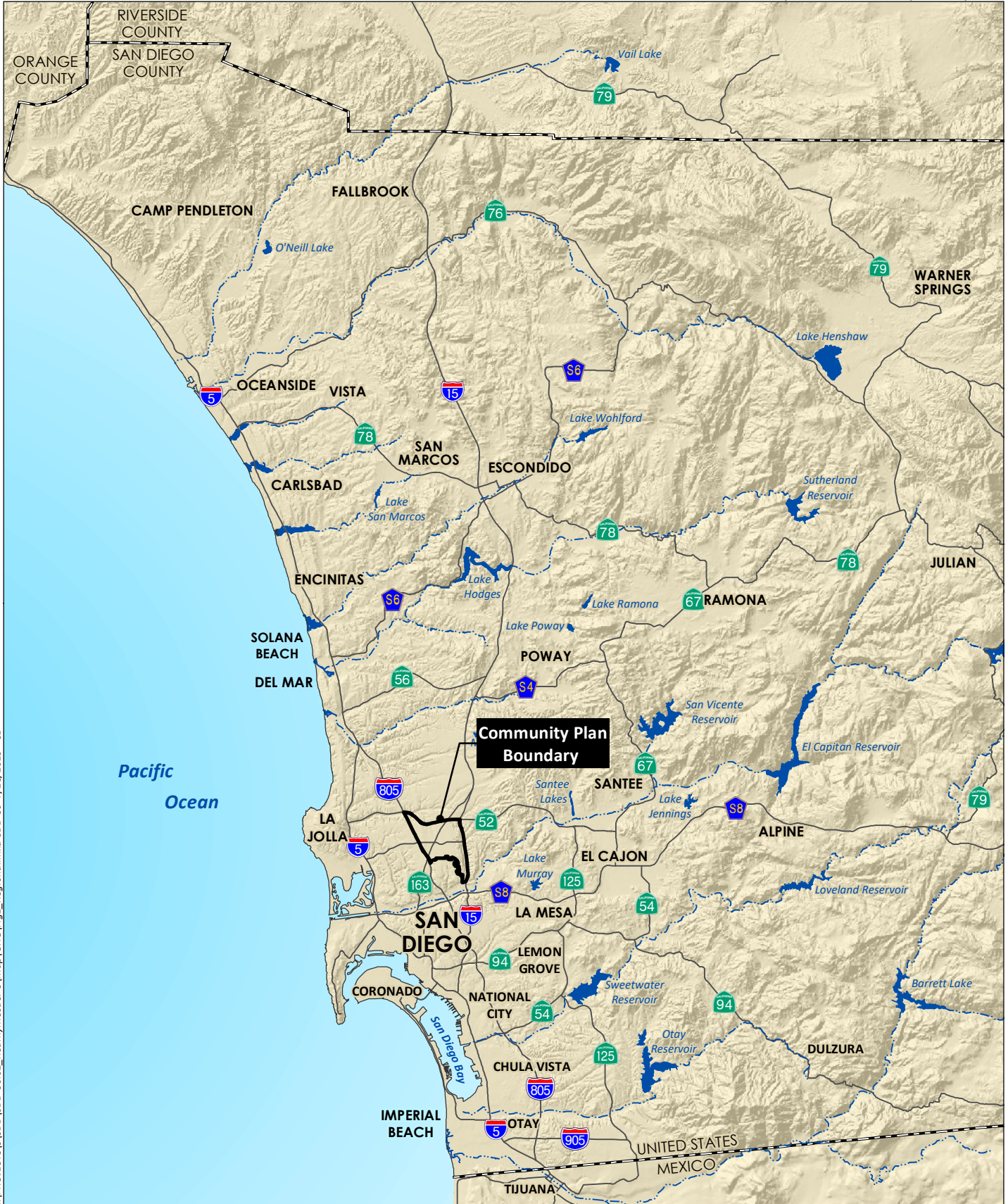
2.0 ENVIRONMENTAL SETTING

2.1 CLIMATE CHANGE OVERVIEW

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

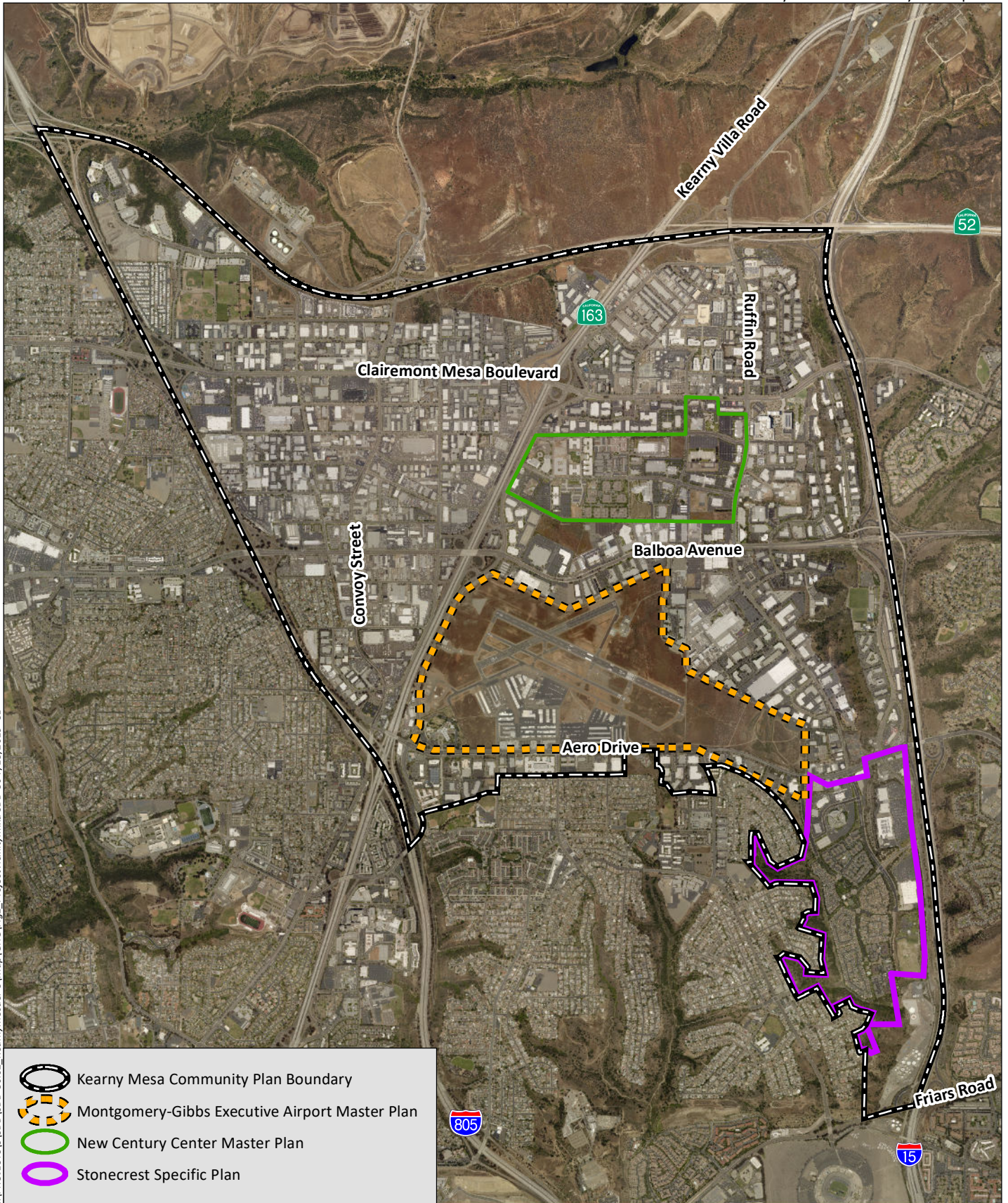
GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 global surface temperatures ranking as the warmest year on record since 1880 (National Aeronautics and Space Administration

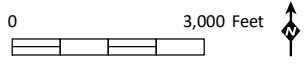


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Source: Base Map Layers (SanGIS, 2016)



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Source: Aerial (SanGIS 2017)

[NASA] 2018). The newest release in long-term warming trends announced 2017 ranked as the second warmest year with an increase of 1.62 degrees Fahrenheit compared to the 1951-1980 average (NASA 2018). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (United Nations Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a “high confidence” that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO₂e) by the year 2100 (IPCC 2014).

2.2 GREENHOUSE GASES

The GHGs defined under California’s Assembly Bill (AB) 32 include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

CO₂ is the most important and common anthropogenic GHG. CO₂ is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic sources of CO₂ include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO₂ concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). As of April 2019, the CO₂ concentration exceeded 411 ppm (National Oceanic and Atmospheric Administration [NOAA] 2019).

CH₄ is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

N₂O is produced by both natural and human-related sources. N₂O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N₂O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth’s surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions

vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO₂. For example, because methane and N₂O are approximately 25 and 298 times more powerful than CO₂, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO₂ has a GWP of 1). CO₂e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO₂e. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 1, *Global Warming Potentials and Atmospheric Lifetimes*. As shown in the table, the GWP for common GHGs ranges from 1 (CO₂) to 22,800 (SF₆).

Table 1
GLOBAL WARMING POTENTIALS AND ATMOSPHERIC LIFETIMES

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-324a	14	1,430
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800

Source: IPCC 2007

HFC: hydrofluorocarbon; PFC: perfluorocarbon

2.3 REGULATORY FRAMEWORK

All levels of government have some responsibility for the protection of air quality, and each level (federal, State, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

2.3.1 Federal

2.3.1.1 Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* (USEPA) that CO₂ is an air pollutant, as defined under the Clean Air Act (CAA), and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO₂, CH₄, N₂O, HFC, PFC, and SF₆) threaten the public health and welfare of the American people. This action was a prerequisite to finalizing the USEPA's GHG emissions standards for light-duty vehicles, which were jointly proposed by the USEPA and the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA). The standards were established on April 1, 2010 for 2012 through 2016 model year vehicles and on October 15, 2012 for 2017 through 2025 model year vehicles (USEPA 2017; USEPA and NHTSA 2012).

2.3.1.2 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the NHTSA have been working together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. The USEPA is finalizing the first-ever national GHG emissions standards under the CAA, and the NHTSA is finalizing Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. On April 1, 2010, the USEPA and NHTSA announced a joint Final Rulemaking that established standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. The rules require these vehicles to meet an estimated combined average emissions level of 250 grams per mile by 2016, decreasing to an average industry fleet-wide level of 163 grams per mile in model year 2025. The 2016 standard is equivalent to 35.5 miles per gallon (mpg), and the 2025 standard is equivalent to 54.5 mpg if the levels were achieved solely through improvements in fuel efficiency. The agencies expect, however, that a portion of these improvements will be made through improvements in air conditioning leakage and the use of alternative refrigerants that would not contribute to fuel economy. These standards would cut GHG emissions by an estimated 2 billion metric tons (MT) and 4 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2017–2025). The combined USEPA GHG emission standards and NHTSA CAFE standards resolve previously conflicting requirements under both federal programs and the standards of the State of California and other states that have adopted the California standards (USEPA 2017; USEPA and NHTSA 2012).

2.3.2 California Greenhouse Gas Regulations

There are numerous State plans, policies, regulations, and laws related to GHG emissions and global climate change. Following is a discussion of some of these plans, policies, and regulations that (1) establish overall State policies and GHG emission reduction targets; (2) require State or local actions that result in direct or indirect GHG emission reductions for the proposed project; and (3) require CEQA analysis of GHG emissions.

2.3.2.1 California Energy Code

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2016 and went into effect on January 1, 2017. The 2016 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. The 2019 standards will continue to improve upon the 2016 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 standards will go into effect on January 1, 2020.

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

2.3.2.2 California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR (CBSC 2017). The City of San Diego adopts CALGreen with city-specific amendments to Chapter 14 Article 10 of the municipal code. The current 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2017. The 2019 Standards will continue to improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 Standards will go into effect on January 1, 2020.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

2.3.2.3 Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

2.3.2.4 Assembly Bill 32 – Global Warming Solution Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires that the California Air Resources Board (CARB) develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

2.3.2.5 Senate Bill 375

Senate Bill (SB) 375, the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, CARB sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPOs). CARB periodically reviews and updates the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. CARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy (APS) to meet the targets. The APS is not a part of the RTP. Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

The San Diego Association of Governments (SANDAG) is San Diego's local MPO and has responded to the requirements of SB 375 with the preparation of The Regional Plan (SANDAG 2015) discussed in greater detail in Section 2.3.3, below.

2.3.2.6 Senate Bill 743

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started a process that changes transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

2.3.2.7 Senate Bill 97

SB 97 required the Governor's Office of Planning and Research to develop recommended amendments to the State CEQA Guidelines for addressing GHG emissions, including the effects associated with transportation and energy consumption. The amendments became effective on March 18, 2010.

2.3.2.8 Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California is on track to meet or exceed the target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

2.3.2.9 Senate Bill 32 and Assembly Bill 197

As a follow-up to AB 32 and in response to EO-B-30-15, SB 32 was passed by the California legislature in August 2016 to codify the EO's California GHG emission reduction target of 40 percent below 1990 levels by 2030 and requires the State to invest in the communities most affected by climate change. AB 197 establishes a legislative committee on climate change policies to help continue the State's activities to reduce GHG emissions.

2.3.2.10 Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal CAFE rules for passenger vehicles (CARB 2017a). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single packet of standards called Advanced Clean Cars (CARB 2017a).

2.3.2.11 Assembly Bill 341

The State legislature enacted AB 341 (California Public Resource Code Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

2.3.2.12 Executive Order S-01-07 – Low Carbon Fuel Standard

This EO, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the

District Court’s opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

2.3.2.13 Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California’s renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions, and increase the use of clean energy.

2.3.2.14 California Air Resources Board: Climate Change Scoping Plan

On December 11, 2008, CARB adopted the Scoping Plan (CARB 2008) as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. Measures applicable to development projects include those related to energy-efficiency building and appliance standards, the use of renewable sources for electricity generation, regional transportation targets, and green building strategy. Relative to transportation, the Scoping Plan includes nine measures or recommended actions related to reducing VMT and vehicle GHG emissions through fuel and efficiency measures. These measures would be implemented statewide rather than on a project by project basis.

In response to EO B-30-15 and SB 32, all State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target since the mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down emissions. Therefore, CARB adopted the 2017 Climate Change Scoping Plan Update, Proposed Strategy for Achieving California’s 2030 Greenhouse Gas Target, in December 2017. The Scoping Plan Update establishes a proposed framework for California to meet a 40 percent reduction in GHGs by 2030 compared to 1990 levels (CARB 2017b).

2.3.3 Local

2.3.3.1 San Diego Association of Government’s Regional Plan

The Regional Plan (SANDAG 2015) is the long-range planning document developed to address the region’s housing, economic, transportation, environmental, and overall quality-of-life needs. The underlying purpose of the Regional Plan is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County as stipulated under SB 375. The Regional Plan establishes a planning framework and implementation actions that increase the region’s sustainability and encourage “smart growth while preserving natural resources and limiting urban sprawl.” The Regional Plan encourages the regions and the County to increase residential and employment concentrations in areas with the best existing and future transit connections, and to preserve important open spaces. The focus is on implementation of basic smart growth principles designed to strengthen the integration of land use and transportation. General urban form goals, policies, and objectives are summarized as follows:

- Mix compatible uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, natural beauty, and critical environmental areas.
- Strengthen and direct development towards existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair, and cost-effective.
- Encourage community and stakeholder collaboration in development decisions.

The Regional Plan also addresses border issues, providing an important guideline for communities that have borders with Mexico. In this case, the goal is to create a regional community where San Diego, its neighboring counties, tribal governments, and northern Baja California mutually benefit from San Diego's varied resources and international location.

On February 22, 2019, the SANDAG Board of Directors approved an action plan to develop a new vision for the 2021 Regional Plan that would transform the way people and goods move throughout the region. Development of the 2021 Regional Plan, including the associated projects, programs, and policies, is underway and going through the planning process with an anticipated adoption by late 2021.

2.3.3.2 City of San Diego General Plan

The City of San Diego General Plan includes several climate change-related policies aimed at reducing GHG emissions from future development and City operations. For example, Conservation Element policy CE-A.2 aims to reduce the City's carbon footprint and to develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth related to climate change (City 2008). The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions, while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or State and federal legislation. The 2008 General Plan was adopted in 2009 and amended in 2010 and 2012.

2.3.3.3 City of San Diego Climate Action Plan

In October 2010, the City Council established the Environmental and Economic Sustainability Task Force as an independent advisory body to work with City staff on the development of a plan for both City operations and the community to reduce GHG emissions and to begin to evaluate vulnerabilities in the community and outline adaptation strategies. On December 15, 2015, the City Council unanimously approved adoption of the Climate Action Plan (CAP). The CAP serves four primary purposes:

(1) providing a roadmap for the City to achieve GHG reductions; (2) conforming the City’s climate change efforts to California laws and regulations; (3) implementing climate change actions from the General Plan; and (4) providing CEQA tiering for the GHG emissions of new development.

To provide a mechanism for CEQA tiering, the City developed a CAP Consistency Checklist (Checklist) to provide a streamlined review process for GHG emissions analysis of proposed new developments that are subject to CEQA. The Checklist contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with relevant CAP strategies that work toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions, and incorporate the measures in this Checklist to the extent feasible.

3.0 EXISTING CONDITIONS

3.1 STATE AND REGIONAL GHG INVENTORIES

CARB performs statewide GHG inventories. The inventory is divided into six broad sectors; agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO₂e. Table 2, *California Greenhouse Gas Emissions by Sector*, shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2016.

Table 2
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR
(MMT CO₂e)

Sector	1990	2000	2010	2017
Agriculture and Forestry	23.6 (5%)	31.0 (7%)	33.7 (8%)	32.4 (8%)
Commercial	14.4 (3%)	14.1 (3%)	20.1 (4%)	23.3 (5%)
Electricity Generation	110.6 (26%)	105.3 (22%)	90.6 (20%)	62.6 (15%)
Industrial	103.0 (24%)	105.8 (22%)	101.6 (23%)	101.1 (24%)
Residential	29.7 (7%)	31.7 (7%)	32.1 (7%)	30.4 (7%)
Transportation	150.7 (35%)	183.2 (39%)	170.2 (38%)	174.3 (41%)
TOTAL	433.3	471.1	448.5	424.1

Source: CARB 2007 and CARB 2019

MMT = million metric tons; CO₂e = carbon dioxide equivalent

As shown in Table 2, statewide GHG emissions totaled approximately 433 MMT CO₂e in 1990, 471 MMT CO₂e in 2000, 449 MMT CO₂e in 2010, and 424 MMT CO₂e in 2017. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial emissions and electricity generation.

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC) that took into account the unique characteristics of the region. Their 2010 emissions inventory for San Diego is duplicated below in Table 3, *San Diego County Greenhouse Gas Emissions by Sector*. The sectors included in this inventory are somewhat different from

those in the statewide inventory. Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide, followed by emissions associated with energy use.

Table 3
SAN DIEGO COUNTY GREENHOUSE GAS EMISSIONS BY SECTOR
(MMT CO₂e)

Sector	2010
On-road Transportation	14.4 (43%)
Electricity	8.3 (25%)
Natural Gas Consumption	2.9 (9%)
Off-Road Equipment and Vehicles	1.4 (4%)
Civil Aviation	1.9 (6%)
Waste	0.6(2%)
Industrial	1.8 (5%)
Water-Borne Navigation	0.1 (<1%)
Rail	0.3 (1%)
Agriculture/Forestry/Land Use	0.5 (2%)
Other	1.6 (5%)
Sequestration	-0.7 (-2%)
TOTAL	33.2

Source: University of San Diego 2013
MMT = million metric tons; CO₂e = carbon dioxide equivalent

3.2 CITY OF SAN DIEGO CAP INVENTORY

A San Diego regional emissions inventory, prepared as part of the City’s CAP, reported GHG emissions totaling 13 MMT CO₂e in 2010. Similar to the statewide emissions, transportation-related GHG emissions contributed the most citywide, followed by emissions associated with energy use.

3.3 KEARNY MESA CPU AREA GHG INVENTORY

A baseline analysis of the existing GHG emissions from the CPU area land uses and associated traffic was performed using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and EMFAC2014, respectively. Both land use and traffic assumptions were adapted from the Mobility Technical Report prepared for the CPU (City 2020). This is the same methodology used for estimating GHG emissions resulting from the proposed CPU (refer to Section 4.1). In brief, CalEEMod is a computer model that estimates GHG emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating and cooling, ventilation and lighting, and plug-in appliances), water use, and solid waste disposal based on land use categories.

Table 4, *Baseline Kearny Mesa CPU Area Land Uses*, lists the land use quantities that were input to CalEEMod to estimate baseline area GHG emissions.

Table 4
BASELINE KEARNY MESA CPU AREA LAND USES

Land Use	Existing Area
Single Family Residential (dwelling units)	144
Multi-Family Residential (dwelling units)	2,388
Mobile Home (dwelling units)	325
Institutional (square feet)	3,335,516
Educational (square feet)	248,339
Commercial Office (square feet)	11,654,234
Retail (square feet)	7,244,096
Visitor Commercial (square feet)	571,027
Industrial (square feet)	11,865,171
Parks and Recreation (acres)	95
Transportation (square feet)	235,284

Source: City 2019

Note: Baseline land use inventory for year 2012.

CPU = Community Plan Update

The complete calculations of baseline GHG emissions, including the CalEEMod input parameters and reported results, are included in Appendix A and summarized below.

3.3.1 Area Sources

CalEEMod estimates that existing area sources (fireplaces, woodstoves, and landscape maintenance equipment), determined from the land use inputs identified in Table 4, emit approximately 2,074 MT CO₂e per year.

3.3.2 Energy Use Emissions

As discussed in greater detail in Section 4.1.4, CalEEMod default energy consumption values assume compliance with the 2016 Title 24 energy code. Adjustments to simulate the 2005 Title 24 energy code are available in the model by selecting the “use historical data” box. Therefore, for the existing conditions energy emissions estimate the historical data box was selected in order to reflect GHG emissions from energy use as associated with a building built to the 2005 Title 24 energy code. Based on the existing land use inputs identified in Table 4 and average electricity and natural gas consumption rates adjusted to 2005 Title 24 Energy Efficiency Standards in CalEEMod, the CPU area’s existing buildings are estimated to emit approximately 215,367 MT CO₂e per year.

3.3.3 Vehicle Emissions

Regional mobile-source emissions were estimated based on CARB’s Emission Factor model (EMFAC2014; CARB2014) and the vehicle miles travelled (VMT) for the area estimated in the Mobility Technical Report prepared for the CPU (City 2020). Based on the TIS, 2,477,173 VMT are generated in the base year. The CPU area’s baseline mobile source emissions are estimated at approximately 371,670 MT CO₂e per year.

3.3.4 Solid Waste Emissions

Existing solid waste generation within the CPU area was estimated by CalEEMod by multiplying the land use inputs identified in Table 4 with average waste generation rates obtained from the California

Department of Resources Recycling and Recovery (CalRecycle). Using these defaults, the existing estimated GHG emissions related to solid waste is 20,036 MT CO₂e per year.

3.3.5 Water Use Emissions

Water-related GHG emissions are from the conveyance and treatment of water. The California Energy Commission’s 2006 Refining Estimates of Water-Related Energy Use in California defines average energy values for water in Southern California. These values are used in CalEEMod to establish default water-related emission factors. Using these defaults, the existing estimated GHG emissions related to water treatment and conveyance is 40,160 MT CO₂e per year.

3.3.6 Total Baseline Kearny Mesa CPU Area GHG Emissions

The results of the analysis described above indicate that the Baseline CPU area uses are currently generating approximately 649,307 MT CO₂e annually as shown in Table 5, *Existing Kearny Mesa Community Plan Area Greenhouse Gas Emissions*, below.

**Table 5
EXISTING KEARNY MESA COMMUNITY PLAN AREA
GREENHOUSE GAS EMISSIONS**

Source	MT CO ₂ e per year
Area	2,074 (<1%)
Energy	215,367 (33%)
Mobile	371,670 (57%)
Waste	20,036 (3%)
Water	40,160 (6%)
Total	649,307

CalEEMod outputs provided in Appendix A
MT = metric tons; CO₂e = carbon dioxide equivalent

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 METHODOLOGY

GHG emissions from area, energy, waste, and water sources were estimated using CalEEMod Version 2016.3.2 for full buildout of both the adopted Community Plan and the proposed CPU for the year 2050. The model estimates criteria air pollutants and GHG emissions by multiplying emission source intensity factors by estimated quantities of emission sources based on the land use information entered by the user in the first module of the model. In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. In various places, the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. The subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions, area sources

(woodstoves, fireplaces, consumer products, landscape maintenance equipment, and architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components including an associated mitigation module to account for further reductions in the reported baseline calculations. These reductions are linked to several of the quantifiable mitigation measures identified in the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* August 2010 report (CAPCOA 2010).

Each of the modules' methodology and input data are described below. The reported GHG estimates based on these inputs are provided in Section 5.1. All CalEEMod inputs and detailed results are provided in Appendix A.

Regional mobile-source emissions were estimated based on CARB's Emission Factor model (EMFAC2014; CARB 2014) and the VMT for the area estimated in the Mobility Technical Report prepared for the CPU (City 2020).

4.1.1 Defining Project Characteristics and Land Use

In this module the user is prompted to enter the project's location, setting, climate zone, utility provider, and the specific land uses that will occur. For this analysis, the location was selected as San Diego County with an urban setting, in climate zone 13, served by San Diego Gas and Electric (SDG&E). By identifying the utility provider, its specific energy intensity factors are loaded into the model's calculations.

Land Use Assumptions

For comparative purposes, GHG emissions were calculated for land uses under buildout of the adopted Kearny Mesa Community Plan and the proposed CPU land use plan for the year 2050 using CalEEMod 2016.3.2 and EMFAC2014. Table 6, *Adopted Community Plan and Proposed CPU Land Uses*, lists the buildout land use quantities that were input to CalEEMod to estimate future Kearny Mesa area emissions for both the adopted Community Plan and proposed CPU (City 2019). As shown in Table 6, the buildout totals include several existing land uses that would remain and not be redeveloped as part of the proposed project, as well as anticipated new/redeveloped land uses. These are distinguished in Table 6 as "Existing to Remain" and "New Development," and were subject to different model assumptions as described below.

Emission estimates were calculated for the three GHGs of primary concern (CO₂, CH₄, and N₂O) that would be emitted from construction and the five primary operational sources that would be associated with the Plan buildout: on-road vehicular traffic, use of fireplaces and consumer products, energy use (composed of electricity use and natural gas consumption), water use, and solid waste disposal.

Table 6
ADOPTED COMMUNITY PLAN AND PROPOSED CPU BUILDOUT LAND USES

Land Use	Base Year (2012)	Adopted Community Plan			Proposed CPU		
		Existing to Remain from the Base Year	Proposed New Development	Plan Total	Existing to Remain from the Base Year	Proposed New Development	Plan Total
Single Family Residential (dwelling units)	144	144	0	144	144	0	144
Multi Family Residential (dwelling units)	2,388	2,388	3,025	5,413	2,388	23,294	25,682
Mobile Home (dwelling units)	325	325	0	325	0	0	0
Institutional (square feet)	3,335,516	3,335,516	1,236,656	4,572,172	3,335,516	6,097	3,341,613
Educational (square feet)	248,339	236,225	0	236,225	248,339	1,048,475	1,296,814
Commercial Office (square feet)	11,654,234	11,654,234	1,882,783	13,537,017	11,654,234	9,059,448	20,713,682
Retail (square feet)	7,244,096	7,244,096	1,733,169	8,977,265	7,244,096	4,852,943	12,097,039
Visitor Commercial (square feet)	571,027	571,027	129,528	700,555	571,027	285,108	856,135
Industrial	11,865,171	11,865,171	5,000,490	16,865,661	11,865,171	7,224,579	19,089,750
Parks and Recreation (acres)	95	83	2	85	78	2	80
Transportation (square feet)	235,284	195,878	0	195,878	145,533	0	145,533

Source: City of San Diego 2019

4.1.2 Estimating Construction Emissions

Construction GHG emissions associated with proposed CPU buildout would include all construction activities through 2050 because GHG emissions impacts are cumulative in nature. There are no localized impacts associated with GHG emissions as impacts are a phenomenon affecting global climate. Air quality emissions, on the other hand, can create localized air quality impacts that warrants project level evaluation based on potential construction scenarios that could occur within the CPU area. Thus, consistent with the methodology used in the San Diego County Updated Greenhouse Gas Inventory 2013, which forecasts that construction emissions would comprise roughly 2.1 percent of total GHG emissions within the County of San Diego, total construction emissions associated with the CPU area are estimated at 2.1 percent of the total operational GHG emissions associated with buildout of the proposed CPU.

4.1.3 Estimating Vehicle Emissions

Regional mobile-source emissions were estimated based on CARB's Emission Factor model (EMFAC2014; CARB2014) and the VMT for the area estimated in the Mobility Technical Report prepared for the CPU (City 2020). Based on the Mobility Technical Report, approximately 2,477,173 VMT are generated in the base year, buildout of the adopted Community Plan would generate approximately 2,809,408 VMT, and buildout of the proposed CPU would generate approximately 3,698,527 VMT.

4.1.4 Estimating Energy Use Emissions

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. GHGs are generated during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect and are calculated in CalEEMod as associated with a building's operation.

CalEEMod default energy values are based on the CEC-sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies, which identify energy use by building type and climate zone. Each land use type input to the land use module is mapped in the energy module to the appropriate CEUS and RASS building type. Because these studies are based on older buildings, adjustments have been made in CalEEMod to account for changes to Title 24 building codes. The default adjustment is to the 2016 Title 24 energy code (part 6 of the building code). Should a user wish to simulate the 2005 Title 24 energy code, adjustments are available in the model by selecting the "use historical data" box.

For the estimates of the proposed CPU, energy emissions were estimated using two runs of the model. One run assumed the default 2016 Title 24 energy code for the portion of the total buildout land use quantities that would be new (i.e., the Proposed New Development land uses), and therefore constructed in accordance with the 2016 Title 24 energy code. The second model run for the CPU selected the historical data box for the portion of the total buildout land use quantities that comprise existing land uses that would not change (i.e., the Existing to Remain land uses). The two model runs were then added together to obtain the total projected energy emissions associated with the proposed CPU buildout. Table 6 lists the buildout land use quantities that were input to the Existing to Remain and Proposed New Development CalEEMod energy module runs.

4.1.5 Estimating Area Source Emissions

This CalEEMod module estimates the GHG emissions that would occur from the use of hearths, woodstoves, and landscaping equipment. This module also estimates emissions due to use of consumer products and architectural coatings that have volatile organic compounds (VOCs); however, these sources do not emit GHGs. The use of hearths and woodstoves directly emits CO₂ from the combustion of natural gas, wood, or biomass, some of which are thus classified as biogenic. CalEEMod estimates emissions from hearths and woodstoves only for residential uses based on the type and size of features of the residential land use inputs. Modeling assumed only natural gas hearths.

The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. CalEEMod estimates the number and type of equipment needed based on the number of summer days given the project's location as entered in the project characteristics module. The model defaults for landscaping equipment were assumed.

4.1.6 Estimating Water and Wastewater Emissions

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both methane and nitrous oxide.

CalEEMod uses default electricity intensity values for various phases of supplying and treating water from CEC's *Refining Estimates of Water-Related Energy Use in California*. The model estimates water/wastewater emissions by multiplying the total projected water/wastewater demand by the applicable water electricity intensities and by the utility intensity GHG factors.

The default water module assumptions were used for the estimates of existing conditions, including the existing land uses that would remain and not change. However, for the future/new land uses, the water mitigation module was used to account for an overall 20 percent reduction in water use for new development that would have to comply with recent requirements of CALGreen. Similar to energy use, recent updates to the water conservation element of Title 24 have resulted in increased water conservation for development subsequent to 2010. New construction and redevelopment that would occur under the CPU would be constructed in accordance with the current CALGreen water conservation requirements. Because CALGreen requires a minimum 20 percent reduction in water use, a 20 percent reduction in water use was factored into the emissions calculations for new development by using the mitigation module. As with the energy efficiency improvements due to Title 24 updates, the improvements in water conservation were only applied to the new land use buildout quantities expected (i.e., the New Development quantities), not the whole buildout quantity.

4.1.7 Estimating Solid Waste Emissions

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. CalEEMod determines the GHG emissions associated with disposal of solid waste into landfills. Portions of these emissions are biogenic. To estimate the GHG emissions that would be generated by disposing of the solid waste associated with the proposed CPU buildout, the total volume of solid waste associated with the CPU was first estimated in the model using waste disposal rates identified by CalRecycle. CalEEMod methods for quantifying GHG emissions from

solid waste are based on the IPCC method using the degradable organic content of waste. Existing, adopted Community Plan, and CPU GHG emissions associated with waste disposal were all calculated using CalEEMod's default parameters. Though the City of San Diego currently diverts approximately 67 percent of its solid waste through the City Recycling Ordinance, a conservative 25 percent solid waste diversion rate was applied to the new construction and redevelopment that would occur to account for mandatory compliance with AB 341.

4.2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

The City (2016) has approved guidelines for determining significance based on Appendix G.VII of the State CEQA Guidelines, which provide guidance that a project would have a significant environmental impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with the City's CAP or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The CAP was originally adopted in December 2015, and future implementing actions necessary for the CAP PEIR to serve as a Qualified GHG Reduction Plan under CEQA Guidelines Section 15183.5 were adopted by City Council on July 12, 2016. This section of the CEQA Guidelines permits for discretionary projects under CEQA that are consistent with the CAP, to be able to tier off the GHG analysis set forth in the CAP Final EIR, which was certified on December 15, 2015, with an addendum certified on July 12, 2016. Analysis within this PEIR directly tiers off of the CAP PEIR for cumulative GHG Emissions under Section 15183.5. As such, consistency with the City's CAP is used to evaluate the significance of the proposed CPU's GHG impact.

5.0 PROJECT IMPACTS

This section evaluates potential direct impacts of the CPU related to the generation of GHG emissions.

5.1 GENERATION OF GREENHOUSE GAS EMISSIONS

5.1.1 Impacts

For the purposes of determining the increase in GHG emissions, an inventory was developed based on the land use designations associated with the adopted Community Plan using CalEEMod, as described in Section 4.1. Emissions from the proposed CPU were then compared with those associated with the adopted Community Plan.

5.1.1.1 Adopted Community Plan Emissions

The projected GHG emissions that would be generated from buildout of the adopted Community Plan were estimated using the methodology described in Section 4.1. The complete calculations including the input parameters are included in Appendix A.

As illustrated in Table 7, *Adopted Community Plan Annual Greenhouse Gas Emissions*, buildout of the adopted Community Plan would result in 628,265 MT CO₂e per year.

Table 7
ADOPTED COMMUNITY PLAN
ANNUAL GREENHOUSE GAS EMISSIONS

Emission Source	Emissions (MT CO ₂ e/year)
Area	4,269 (1%)
Energy	247,429 (39%)
Mobile	295,450 (47%)
Solid Waste	22,791 (4%)
Water	45,403 (7%)
Construction	12,922 (2%)
TOTAL	628,265

CalEEMod output data is provided in Appendix A
Note: Totals may not add up exactly due to rounding
MT = metric tons; CO₂e = carbon dioxide equivalent

5.1.1.2 Kearny Mesa CPU Emissions

The projected GHG emissions that would be generated from buildout under the proposed CPU were estimated using the methodology described in Section 4.1. The complete calculations including the input parameters are included in Appendix A.

As shown in Table 8, *Proposed CPU Annual Greenhouse Gas Emissions*, buildout of the proposed CPU would result in GHG emissions of 897,995 MT CO₂e per year.

Table 8
PROPOSED CPU ANNUAL GREENHOUSE GAS EMISSIONS

Emission Source	Emissions (MT CO ₂ e/year)
Area	18,739 (2%)
Energy	367,458 (41%)
Mobile	390,194 (43%)
Solid Waste	33,111 (4%)
Water	70,024 (8%)
Construction	18,470 (2%)
TOTAL	897,995

CalEEMod output data is provided in Appendix A
Note: Totals may not add up exactly due to rounding
CPU = Community Plan Update; MT = metric tons; CO₂e = carbon dioxide equivalent

5.1.1.3 Comparison of Proposed CPU and Adopted Community Plan GHG Emissions

For the purposes of determining the increase in GHG emissions associated with the proposed CPU, GHG emissions attributable to the CPU at full buildout are compared to GHG emissions under the existing condition and the adopted Community Plan. As illustrated in Table 9, *Emissions Comparison for the CPU Area*, the total GHG emissions attributable to the existing condition are approximately 649,307. Total GHG emissions attributable to the adopted Community Plan are approximately 628,265 MT CO₂e per year. Total GHG emissions attributable to the CPU are approximately 897,995 MT CO₂e per year. As such, the CPU would result in an increase of approximately 248,688 MT CO₂e per year when compared to the existing condition and an increase of approximately 269,730 MT CO₂e per year when compared to the adopted Community Plan.

Table 9
COMPARISON OF ADOPTED COMMUNITY PLAN VERSUS PROPOSED CPU EMISSIONS

Emission Source	Annual Emissions (MT CO ₂ e/year)				
	Baseline (2019)	Adopted Community Plan (2050)	Proposed CPU (2050)	Difference (Proposed – Adopted)	Difference (Proposed – Baseline)
Area	2,074	4,269	18,739	14,470	16,665
Energy	215,367	247,429	367,458	120,029	152,091
Mobile	371,670	295,450	390,164	94,744	18,524
Solid Waste	20,036	22,791	33,111	10,319	13,074
Water	40,160	45,403	70,024	24,620	29,864
Construction	0	12,922	18,470	5,548	18,470
TOTAL	649,307	628,265	897,995	269,730	248,688

CalEEMod output data is provided in Appendix A

Note: Totals may not add up exactly due to rounding

CPU = Community Plan Update; MT = metric tons; CO₂e = carbon dioxide equivalent

5.1.2 Significance of Impacts

For the purposes of determining significance, GHG emissions attributable to the proposed CPU in Year 2050 were compared to the adopted Community Plan GHG emissions. This comparison is appropriate because the GHG emissions from the adopted Community Plan were used when developing the City’s CAP GHG Inventory.

As shown in Table 9, the proposed CPU would result in an increase in GHG emissions of approximately 269,730 MT CO₂e per year when compared to the emissions that would occur under the adopted Community Plan. This is because implementation of the proposed CPU (at full buildout) would include an additional 19,944 residential dwelling units, 2,224,089 SF of industrial, and 10,452,019 SF of retail and commercial space over the adopted Community Plan. The majority of the new multi-family dwelling units and arterial commercial uses are planned within the pedestrian-oriented Convoy Street Corridor Village, Clairemont Mesa Boulevard Village, and Aero Drive Village. Additionally, the proposed Ruffin Technology Cluster links businesses to the community while providing pedestrian walkways, views of the airport, and valuable connections. All of these areas are located within designated Transit Priority Areas (TPA). By placing these uses within a TPA, the CPU would implement the CAP and City of Villages strategies by focusing projected future growth into mixed-use and multiple-use activity centers that are

pedestrian- and bicycle-friendly and linked to transit. Consistency with the CAP and City of Villages strategy would result in implementation of the CPU having an increase in aggregated GHG emissions from increased population; however, on a per capita basis a decrease of GHG emissions would occur. Further, overall citywide GHG emissions per capita would decrease, consistent with the City's CAP targets for citywide GHG emissions reductions.

Therefore, while the CPU would increase aggregated GHG emissions over those of the adopted Community Plan at buildout (year 2050), this increase in GHG is a direct result of the implementation of CAP Strategies and the General Plan's City of Villages Strategy. Increasing residential and commercial density in transit corridors and villages within a TPA would support the City in achieving the GHG emissions reduction targets of the CAP, and thus, impacts associated with GHG emissions would be less than significant.

5.1.3 Mitigation Measures

Impacts would be less than significant; thus, no mitigation is required.

5.1.4 Significance After Mitigation

Impacts related to GHG emissions would be less than significant.

5.2 CONSISTENCY WITH ADOPTED PLANS

5.2.1 Impacts

The regulatory plans and policies discussed in Section 2.3 above aim to reduce national, State, and local GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. Plan goals and regulatory standards are, thus, largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three-pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding, and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use change and infrastructure investments.

For the energy sector, the reduction strategies aim to reduce energy demand; impose emission caps on energy providers; establish minimum building energy and green building standards; transition to renewable non-fossil fuels; incentivize homeowners and builders; fully recover landfill gas for energy; expand research and development; and so forth.

5.2.1.1 Consistency with State Plans

EO S-3-05 established GHG emission reduction targets for the State, and AB 32 launched the Climate Change Scoping Plan that outlined the reduction measures needed to reach these targets. The Scoping Plan and its implementing and complementary regulations are discussed in Section 2.3. Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the Specific Plan would be Actions E-1 and GB-1. CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards. The new construction associated with the CPU would be required to include all mandatory green building measures under the CALGreen Code.

Therefore, the CPU would be consistent with the Scoping Plan measures through incorporation of stricter building and appliance standards.

5.2.1.2 Consistency with Regional Plans

San Diego Association of Government's Regional Plan

The proposed CPU would be consistent with the goals of the Regional Plan to develop compact, walkable communities close to transit connections and consistent with smart growth principles. The CPU supports the multi-modal strategy of SANDAG's Regional Plan through improvements to increase bicycle, pedestrian, and transit access. Policies contained within the proposed CPU Vision and Mobility sections would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. While the proposed CPU would result in increases to both ADT and VMT, both the average trip length (ATL) and the VMT per capita would be reduced. The ATL would be reduced from approximately 4.43 miles per trip under the adopted Community Plan to 4.14 miles per trips under the proposed CPU and the VMT per capita would be reduced from 23.2 miles per capita to 19.4 miles per capita. This type of development is consistent with the goals of the Regional Plan for reducing the emissions associated with new development. Furthermore, access to transit also results in the majority of the CPU area being located within a designated Transit Priority Area consistent with SB 743. No significant adverse environmental effects would result from the adoption of the proposed CPU in terms of consistency or conflict with the Regional Plan.

5.2.1.3 Consistency with Local Plans

New land use designations and policies within the CPU have been designed to reflect and implement the CAP and the GHG reduction recommendations of the General Plan. Specifically, the CPU includes multiple policies aimed at reducing GHG emissions from target emission sources and adapting to climate change. The proposed policies refine existing General Plan policies with site-specific recommendations applicable to the CPU Area.

The CAP establishes five primary strategies for achieving the citywide goals of the plan. Strategy 1 (Energy & Water Efficient Buildings) includes goals, actions, and targets with the aim of reducing building energy consumption. Policies in the CPU's Urban Design and Sustainability section address this strategy. Energy reduction can be achieved through the continued use or adaptive reuse of the existing building stock along with any needed energy efficiency upgrades. The CPU includes narrative and policies in the aforementioned sections for the creation of energy- and water-efficient buildings as well as sustainable building design and incorporation of building features that would reduce water consumption. This is coupled with reducing the dependency on non-renewable energy sources and the maximization of daylight and natural ventilation, the minimization of solar heat gain, and the reduction of emissions.

In regard to CAP Strategy 2, Clean & Renewable Energy, the Urban Design and Sustainability section of the CPU include policies to encourage development that increases resource use efficiency and promotes the use of renewable energy sources and systems. The Public Facilities, Services, and Safety section also contains an overarching goal to become a leading community for the City's Smart City initiative by partnering with local businesses to pilot innovative technologies and infrastructure.

Strategy 3, Bicycling, Walking, Transit & Land Use, of the CAP has a number of goals that relate to land use and planning. Action 3.1 in Strategy 3 of the CAP calls for implementation of the General Plan's Mobility Element and the City of Villages strategy in TPAs to increase the use of transit. The proposed CPU supports a multi-modal strategy through improvements to increase bicycle, pedestrian, and transit access. Policies contained within the proposed CPU's Vision and Mobility sections would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. Furthermore, access to transit also results in the majority of the CPU area being located within a designated TPA.

Consistent with Actions 3.4 and 3.5 of Strategy 3, the CPU includes policies to support intelligent transportation systems to improve roadway and parking efficiency and the exploration of traffic circle opportunities to reduce vehicle fuel consumption. Consistent with Action 3.6 of Strategy 3 of the CAP, the CPU would implement transit-oriented development, particularly along the Convoy Corridor Village, Clairemont Mesa Boulevard Village, and Aero Drive Village. Specific Mobility section goals include, but are not limited to, providing an efficient and accessible multimodal transportation network maximizing connectivity, locating mobility hubs that support the first-last mile strategy, identifying high-quality public transit corridors, and establishing mobility improvements and public infrastructure to enhance the user's experience.

The primary goal of CAP Strategy 4, Zero Waste – Gas & Waste Management, is to divert solid waste and capture landfill methane gas emissions. This strategy is citywide in nature; however, the CPU furthers this strategy by including policies in the Urban Design and Sustainability section that encourage sustainable building and landscapes.

Strategy 5, Climate Resiliency, of the CAP calls for further analysis of the resiliency issues that face the various areas of the City. The citywide strategy is focused around the Pure Water San Diego phased, multi-year program that will use water purification to clean recycled water to ultimately provide one-third of San Diego's water supply locally by 2035. Resiliency is addressed throughout the CPU as it pertains to water usage, energy efficiency, and sustainable development practices as noted above. Also included within the CPU are policies supporting and encouraging an increase in the tree canopy within the community to reduce summer heat temperatures, increase absorption of pollutants and carbon dioxide, and contribute to a more inviting atmosphere for pedestrians.

As discussed above, analysis within this report directly tiers off of the CAP PEIR for cumulative GHG emissions under Section 15183.5. The CPU is consistent with the adopted CAP and contains goals and objectives that implement all of the five primary CAP strategies. Therefore, the proposed CPU would not conflict with the City's CAP or any other applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHG impacts, and impacts would be less than significant.

5.2.2 Significance of Impacts

The proposed CPU would develop compact, walkable communities close to transit connections and consistent with smart growth principles. The CPU supports the multi-modal strategy of the SANDAG Regional Plan through improvements to increase bicycle, pedestrian, and transit access. Policies contained within the proposed CPU Vision and Mobility sections would serve to promote bus transit use as well as other forms of mobility, including walking and bicycling. The proposed CPU incorporates goals and policies intended to support the General Plan and CAP policies and thus, impacts associated with GHG emissions would be less than significant.

5.2.3 Mitigation Framework

Impacts would be less than significant; thus, no mitigation is required.

5.2.4 Significance After Mitigation

Impacts related to GHG emissions would be less than significant.

6.0 LIST OF PREPARERS

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Appendix A

CalEEMod Emission Calculations

KMCPU - Existing Inventory - San Diego County, Annual

KMCPU - Existing Inventory
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	144.00	Dwelling Unit	46.75	259,200.00	412
Apartments Mid Rise	2,388.00	Dwelling Unit	62.84	2,388,000.00	6830
Mobile Home Park	325.00	Dwelling Unit	40.94	390,000.00	930
Junior College (2Yr)	3,335.52	1000sqft	76.57	3,335,516.00	0
High School	248.34	1000sqft	5.70	248,339.00	0
General Office Building	11,654.23	1000sqft	267.54	11,654,234.00	0
Strip Mall	7,244.10	1000sqft	166.30	7,244,096.00	0
Regional Shopping Center	571.03	1000sqft	13.11	571,027.00	0
Industrial Park	11,865.17	1000sqft	272.39	11,865,171.00	0
City Park	95.00	Acre	95.00	4,138,200.00	0
Enclosed Parking Structure	235.28	1000sqft	5.40	235,284.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2019
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

KMCPU - Existing Inventory - San Diego County, Annual

Project Characteristics -

Land Use -

Construction Phase - Not modeling construction

Vehicle Trips - Modeling mobile sources outside CalEEMod using EMFAC

Woodstoves - No woodstoves

Fireplaces modeled as natural gas only (90% NG, 10% no fireplace)

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	PhaseEndDate	9/27/2818	7/29/2776
tblEnergyUse	LightingElect	2.63	2.63
tblEnergyUse	T24E	200.21	200.21
tblEnergyUse	T24E	3.92	3.92
tblEnergyUse	T24E	825.64	825.64
tblEnergyUse	T24E	550.61	550.61
tblEnergyUse	T24NG	4,108.03	4,108.03
tblEnergyUse	T24NG	21,589.28	21,589.28
tblEnergyUse	T24NG	24,260.55	24,260.55
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	1,313.40	2,149.00
tblFireplaces	NumberGas	178.75	293.00
tblFireplaces	NumberGas	79.20	130.00
tblFireplaces	NumberNoFireplace	238.80	239.00
tblFireplaces	NumberNoFireplace	32.50	32.00
tblFireplaces	NumberNoFireplace	14.40	14.00

KMCPU - Existing Inventory - San Diego County, Annual

tblFireplaces	NumberWood	835.80	0.00
tblFireplaces	NumberWood	113.75	0.00
tblFireplaces	NumberWood	50.40	0.00
tblLandUse	LandUseSquareFeet	3,335,520.00	3,335,516.00
tblLandUse	LandUseSquareFeet	11,654,200.00	11,654,234.00
tblLandUse	LandUseSquareFeet	7,244,100.00	7,244,096.00
tblLandUse	LandUseSquareFeet	11,865,200.00	11,865,171.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	5.00	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	4.36	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	SU_TR	20.43	0.00

KMCPU - Existing Inventory - San Diego County, Annual

tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	4.99	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	119.40	0.00
tblWoodstoves	NumberCatalytic	16.25	0.00
tblWoodstoves	NumberCatalytic	7.20	0.00
tblWoodstoves	NumberNoncatalytic	119.40	0.00
tblWoodstoves	NumberNoncatalytic	16.25	0.00
tblWoodstoves	NumberNoncatalytic	7.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

KMCPU - Existing Inventory - San Diego County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.117 1	2,061.117 1	0.0746	0.0371	2,074.048 7
Energy	3.9797	36.1035	29.8340	0.2171		2.7496	2.7496		2.7496	2.7496	0.0000	214,522.1 782	214,522.1 782	7.8042	2.1806	215,367.0 870
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,087.411 7	0.0000	8,087.411 7	477.9523	0.0000	20,036.22 01
Water						0.0000	0.0000		0.0000	0.0000	1,824.861 3	32,218.03 10	34,042.89 22	188.7275	4.6940	40,159.87 69
Total	198.3787	38.1028	52.2241	0.2294	0.0000	3.0091	3.0091	0.0000	3.0091	3.0091	9,912.272 9	248,801.3 263	258,713.5 992	674.5586	6.9116	277,637.2 327

KMCPU - Existing Inventory - San Diego County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.1171	2,061.1171	0.0746	0.0371	2,074.0487
Energy	3.9797	36.1035	29.8340	0.2171		2.7496	2.7496		2.7496	2.7496	0.0000	214,522.1782	214,522.1782	7.8042	2.1806	215,367.0870
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,087.4117	0.0000	8,087.4117	477.9523	0.0000	20,036.2201
Water						0.0000	0.0000		0.0000	0.0000	1,824.8613	32,218.0310	34,042.8922	188.7275	4.6940	40,159.8769
Total	198.3787	38.1028	52.2241	0.2294	0.0000	3.0091	3.0091	0.0000	3.0091	3.0091	9,912.2729	248,801.3263	258,713.5992	674.5586	6.9116	277,637.2327

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/30/2776	7/29/2776	5	0	

Acres of Grading (Site Preparation Phase): 0

KMCPU - Existing Inventory - San Diego County, Annual

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.4

Residential Indoor: 6,150,330; Residential Outdoor: 2,050,110; Non-Residential Indoor: 52,377,575; Non-Residential Outdoor: 17,459,192; Striped Parking Area: 14,117 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	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
Architectural Coating	1	3,312.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

KMCPU - Existing Inventory - San Diego County, Annual

3.2 Architectural Coating - 2776

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

KMCPU - Existing Inventory - San Diego County, Annual

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Mobile Home Park	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

KMCPU - Existing Inventory - San Diego County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
City Park	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Enclosed Parking Structure	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
General Office Building	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
High School	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Industrial Park	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Junior College (2Yr)	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Mobile Home Park	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Regional Shopping Center	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Single Family Housing	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357
Strip Mall	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357

5.0 Energy Detail

KMCPU - Existing Inventory - San Diego County, Annual

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175,136.4583	175,136.4583	7.0493	1.4585	175,747.3175
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175,136.4583	175,136.4583	7.0493	1.4585	175,747.3175
NaturalGas Mitigated	3.9797	36.1035	29.8340	0.2171		2.7496	2.7496		2.7496	2.7496	0.0000	39,385.7199	39,385.7199	0.7549	0.7221	39,619.7696
NaturalGas Unmitigated	3.9797	36.1035	29.8340	0.2171		2.7496	2.7496		2.7496	2.7496	0.0000	39,385.7199	39,385.7199	0.7549	0.7221	39,619.7696

KMCPU - Existing Inventory - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.70857e+006	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.1759	91.1759	1.7500e-003	1.6700e-003	91.7177
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Mobile Home Park	7.69999e+006	0.0415	0.3548	0.1510	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.9009	410.9009	7.8800e-003	7.5300e-003	413.3426
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9797	36.1035	29.8340	0.2171		2.7497	2.7497		2.7497	2.7497	0.0000	39,385.7199	39,385.7199	0.7549	0.7221	39,619.7696

KMCPU - Existing Inventory - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.70857e+006	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.1759	91.1759	1.7500e-003	1.6700e-003	91.7177
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Mobile Home Park	7.69999e+006	0.0415	0.3548	0.1510	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.9009	410.9009	7.8800e-003	7.5300e-003	413.3426
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9797	36.1035	29.8340	0.2171		2.7497	2.7497		2.7497	2.7497	0.0000	39,385.7199	39,385.7199	0.7549	0.7221	39,619.7696

KMCPU - Existing Inventory - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	1.54087e+006	503.5696	0.0203	4.1900e-003	505.3260
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.57695e+006	515.3620	0.0207	4.2900e-003	517.1595
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Mobile Home Park	1.68529e+006	550.7683	0.0222	4.5900e-003	552.6893
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		175,136.4583	7.0493	1.4585	175,747.3175

KMCPU - Existing Inventory - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	1.54087e+006	503.5696	0.0203	4.1900e-003	505.3260
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.57695e+006	515.3620	0.0207	4.2900e-003	517.1595
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Mobile Home Park	1.68529e+006	550.7683	0.0222	4.5900e-003	552.6893
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		175,136.4583	7.0493	1.4585	175,747.3175

6.0 Area Detail

6.1 Mitigation Measures Area

KMCPU - Existing Inventory - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.117 1	2,061.117 1	0.0746	0.0371	2,074.048 7
Unmitigated	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.117 1	2,061.117 1	0.0746	0.0371	2,074.048 7

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	45.2210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	148.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2047	1.7493	0.7444	0.0112		0.1414	0.1414		0.1414	0.1414	0.0000	2,025.835 3	2,025.835 3	0.0388	0.0371	2,037.873 8
Landscaping	0.6836	0.2500	21.6457	1.1400e-003		0.1180	0.1180		0.1180	0.1180	0.0000	35.2818	35.2818	0.0357	0.0000	36.1748
Total	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.117 1	2,061.117 1	0.0746	0.0371	2,074.048 7

KMCPU - Existing Inventory - San Diego County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	45.2210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	148.2897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2047	1.7493	0.7444	0.0112		0.1414	0.1414		0.1414	0.1414	0.0000	2,025.8353	2,025.8353	0.0388	0.0371	2,037.8738
Landscaping	0.6836	0.2500	21.6457	1.1400e-003		0.1180	0.1180		0.1180	0.1180	0.0000	35.2818	35.2818	0.0357	0.0000	36.1748
Total	194.3989	1.9992	22.3900	0.0123		0.2594	0.2594		0.2594	0.2594	0.0000	2,061.1171	2,061.1171	0.0746	0.0371	2,074.0487

7.0 Water Detail

7.1 Mitigation Measures Water

KMCPU - Existing Inventory - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	34,042.89 22	188.7275	4.6940	40,159.87 69
Unmitigated	34,042.89 22	188.7275	4.6940	40,159.87 69

KMCPU - Existing Inventory - San Diego County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 113.191	410.9780	0.0165	3.4200e-003	412.4115
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	8.24604 / 21.2041	114.6949	0.2732	7.2800e-003	123.6939
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Mobile Home Park	21.1751 / 13.3495	145.2957	0.6956	0.0175	167.8838
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		34,042.8922	188.7275	4.6940	40,159.8769

KMCPU - Existing Inventory - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 113.191	410.9780	0.0165	3.4200e-003	412.4115
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	8.24604 / 21.2041	114.6949	0.2732	7.2800e-003	123.6939
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Mobile Home Park	21.1751 / 13.3495	145.2957	0.6956	0.0175	167.8838
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		34,042.8922	188.7275	4.6940	40,159.8769

8.0 Waste Detail

8.1 Mitigation Measures Waste

KMCPU - Existing Inventory - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8,087.4117	477.9523	0.0000	20,036.2201
Unmitigated	8,087.4117	477.9523	0.0000	20,036.2201

KMCPU - Existing Inventory - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	8.17	1.6584	0.0980	0.0000	4.1087
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	322.84	65.5336	3.8729	0.0000	162.3567
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Mobile Home Park	149.5	30.3472	1.7935	0.0000	75.1838
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,087.4117	477.9523	0.0000	20,036.2201

KMCPU - Existing Inventory - San Diego County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	8.17	1.6584	0.0980	0.0000	4.1087
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	322.84	65.5336	3.8729	0.0000	162.3567
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Mobile Home Park	149.5	30.3472	1.7935	0.0000	75.1838
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,087.4117	477.9523	0.0000	20,036.2201

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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KMCPU - Existing Inventory - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Existing KMCP Mobile Emissions

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: San Diego

Calendar Year: 2019

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Vehicle Class	Fuel	SD Population	% Population	KMCP Population	SD VMT	% VMT	KMCP VMT	SD Trips	% Trips	KMCP Trips
San Diego	All Other Buses	DSL	850	0.02%	21	45,528	0.05%	1,120	-	0.00%	0
San Diego	LDA	GAS	1,793,604	52.20%	44,786	51,627,404	51.27%	1,270,055	11,340,178	53.23%	283,165
San Diego	LDA	DSL	24,990	0.73%	624	720,504	0.72%	17,725	158,131	0.74%	3,949
San Diego	LDA	ELEC	330,257	9.61%	8,247	9,581,514	9.52%	235,709	2,095,811	9.84%	52,332
San Diego	LDT1	GAS	128,354	3.74%	3,205	3,617,314	3.59%	88,987	796,424	3.74%	19,887
San Diego	LDT1	DSL	72	0.00%	2	2,013	0.00%	50	444	0.00%	11
San Diego	LDT1	ELEC	57	0.00%	1	1,621	0.00%	40	356	0.00%	9
San Diego	LDT2	GAS	588,968	17.12%	14,684	17,656,932	17.53%	434,368	3,721,796	17.47%	92,933
San Diego	LDT2	DSL	1,295	0.04%	32	38,906	0.04%	957	8,200	0.04%	205
San Diego	LHD1	GAS	11,221	0.33%	280	335,072	0.33%	8,243	167,180	0.78%	4,174
San Diego	LHD1	DSL	26,200	0.76%	654	751,699	0.75%	18,492	329,564	1.55%	8,229
San Diego	LHD2	GAS	4,979	0.14%	124	153,307	0.15%	3,794	74,165	0.35%	1,852
San Diego	LHD2	DSL	12,296	0.36%	307	379,840	0.38%	9,344	154,671	0.73%	3,882
San Diego	MCY	GAS	92,143	2.68%	2,301	554,061	0.55%	13,630	184,267	0.86%	4,601
San Diego	MDV	GAS	330,565	9.62%	8,254	9,402,705	9.34%	231,310	2,056,216	9.65%	51,344
San Diego	MDV	DSL	9,428	0.27%	235	269,940	0.27%	6,641	58,881	0.28%	1,470
San Diego	MH	GAS	7,123	0.21%	178	52,492	0.05%	1,291	713	0.00%	18
San Diego	MH	DSL	2,005	0.06%	50	14,740	0.01%	363	200	0.00%	5
San Diego	Motor Coach	DSL	361	0.01%	9	46,685	0.05%	1,148	-	0.00%	0
San Diego	OBUS	GAS	2,456	0.07%	61	110,723	0.11%	2,724	49,147	0.23%	1,227
San Diego	PTO	DSL	-	0.00%	0	48,221	0.05%	1,186	-	0.00%	0
San Diego	SBUS	GAS	830	0.02%	21	33,261	0.03%	818	3,319	0.02%	83
San Diego	SBUS	DSL	1,395	0.04%	35	47,180	0.05%	1,161	-	0.00%	0
San Diego	T6 Ag	DSL	266	0.01%	7	3,929	0.00%	97	-	0.00%	0
San Diego	T6 CAIRP heavy	DSL	70	0.00%	2	3,158	0.00%	78	-	0.00%	0
San Diego	T6 CAIRP small	DSL	177	0.01%	4	9,695	0.01%	239	-	0.00%	0
San Diego	T6 instate construction heavy	DSL	956	0.03%	24	73,804	0.07%	1,816	-	0.00%	0
San Diego	T6 instate construction small	DSL	4,379	0.13%	109	198,268	0.20%	4,877	-	0.00%	0
San Diego	T6 instate heavy	DSL	8,591	0.25%	215	434,840	0.43%	10,697	-	0.00%	0
San Diego	T6 instate small	DSL	22,317	0.65%	557	1,096,430	1.09%	26,973	-	0.00%	0
San Diego	T6 OOS heavy	DSL	40	0.00%	1	1,810	0.00%	45	-	0.00%	0
San Diego	T6 OOS small	DSL	102	0.00%	3	5,555	0.01%	137	-	0.00%	0
San Diego	T6 Public	DSL	2,697	0.08%	67	45,074	0.04%	1,109	-	0.00%	0
San Diego	T6 utility	DSL	344	0.01%	9	6,478	0.01%	159	-	0.00%	0
San Diego	T6TS	GAS	4,640	0.14%	116	203,127	0.20%	4,997	92,840	0.44%	2,318
San Diego	T7 Ag	DSL	244	0.01%	6	2,922	0.00%	72	-	0.00%	0
San Diego	T7 CAIRP	DSL	1,982	0.06%	49	483,143	0.48%	11,886	-	0.00%	0
San Diego	T7 CAIRP construction	DSL	260	0.01%	6	52,356	0.05%	1,288	-	0.00%	0
San Diego	T7 NNCOOS	DSL	2,529	0.07%	63	896,098	0.59%	14,738	-	0.00%	0
San Diego	T7 NCOOS	DSL	783	0.02%	20	190,841	0.19%	4,695	-	0.00%	0
San Diego	T7 other port	DSL	838	0.02%	21	149,856	0.15%	3,687	-	0.00%	0
San Diego	T7 POLA	DSL	497	0.01%	12	106,599	0.11%	2,622	-	0.00%	0
San Diego	T7 Public	DSL	1,418	0.04%	35	32,496	0.03%	799	-	0.00%	0
San Diego	T7 Single	DSL	2,054	0.06%	52	242,848	0.24%	5,974	-	0.00%	0
San Diego	T7 single construction	DSL	1,440	0.04%	36	135,439	0.13%	3,332	-	0.00%	0
San Diego	T7 SWCV	DSL	2,184	0.06%	55	100,623	0.10%	2,475	-	0.00%	0
San Diego	T7 tractor	DSL	5,625	0.16%	140	733,911	0.73%	18,055	-	0.00%	0
San Diego	T7 tractor construction	DSL	1,212	0.04%	30	100,980	0.10%	2,484	-	0.00%	0
San Diego	T7 utility	DSL	146	0.00%	4	3,328	0.00%	82	-	0.00%	0
San Diego	T7IS	GAS	261	0.01%	7	27,238	0.03%	670	5,222	0.02%	130
San Diego	UBUS	GAS	679	0.02%	17	80,825	0.08%	1,988	2,718	0.01%	68
San Diego	UBUS	DSL	669	0.02%	17	79,601	0.08%	1,958	2,676	0.01%	67
			3,435,960		85,796	100,696,455		2,477,173	21,303,139		531,940

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

KMCPU - Adopted Plan (Existing to Remain)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	144.00	Dwelling Unit	46.75	259,200.00	412
Apartments Mid Rise	2,388.00	Dwelling Unit	62.84	2,388,000.00	6830
Mobile Home Park	325.00	Dwelling Unit	40.94	390,000.00	930
Junior College (2Yr)	3,335.52	1000sqft	76.57	3,335,516.00	0
High School	236.23	1000sqft	5.42	236,225.00	0
General Office Building	11,654.23	1000sqft	267.54	11,654,234.00	0
Strip Mall	7,244.10	1000sqft	166.30	7,244,096.00	0
Regional Shopping Center	571.03	1000sqft	13.11	571,027.00	0
Industrial Park	11,865.17	1000sqft	272.39	11,865,171.00	0
City Park	83.00	Acre	83.00	3,615,480.00	0
Enclosed Parking Structure	195.88	1000sqft	4.50	195,878.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2050
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

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Project Characteristics -

Land Use -

Construction Phase - Not modeling for construction

Vehicle Trips - Mobile emissions calculated outside CalEEMod using EMFAC

Woodstoves - No woodstoves

Fireplaces modeled as natural gas only (90% NG, 10% no fireplace)

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	PhaseEndDate	9/25/2818	7/27/2776
tblEnergyUse	LightingElect	2.63	2.63
tblEnergyUse	T24E	200.21	200.21
tblEnergyUse	T24E	3.92	3.92
tblEnergyUse	T24E	825.64	825.64
tblEnergyUse	T24E	550.61	550.61
tblEnergyUse	T24NG	4,108.03	4,108.03
tblEnergyUse	T24NG	21,589.28	21,589.28
tblEnergyUse	T24NG	24,260.55	24,260.55
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	1,313.40	2,149.00
tblFireplaces	NumberGas	178.75	293.00
tblFireplaces	NumberGas	79.20	130.00
tblFireplaces	NumberNoFireplace	238.80	239.00
tblFireplaces	NumberNoFireplace	32.50	32.00
tblFireplaces	NumberNoFireplace	14.40	14.00

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tblFireplaces	NumberWood	835.80	0.00
tblFireplaces	NumberWood	113.75	0.00
tblFireplaces	NumberWood	50.40	0.00
tblLandUse	LandUseSquareFeet	3,335,520.00	3,335,516.00
tblLandUse	LandUseSquareFeet	11,654,200.00	11,654,234.00
tblLandUse	LandUseSquareFeet	7,244,100.00	7,244,096.00
tblLandUse	LandUseSquareFeet	11,865,200.00	11,865,171.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	5.00	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	4.36	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	SU_TR	20.43	0.00

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tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	4.99	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	119.40	0.00
tblWoodstoves	NumberCatalytic	16.25	0.00
tblWoodstoves	NumberCatalytic	7.20	0.00
tblWoodstoves	NumberNoncatalytic	119.40	0.00
tblWoodstoves	NumberNoncatalytic	16.25	0.00
tblWoodstoves	NumberNoncatalytic	7.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	194.3063	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196
Energy	3.9793	36.0994	29.8306	0.2171		2.7493	2.7493		2.7493	2.7493	0.0000	214,408.2521	214,408.2521	7.7997	2.1796	215,252.7526
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,084.0055	0.0000	8,084.0055	477.7510	0.0000	20,027.7814
Water						0.0000	0.0000		0.0000	0.0000	1,824.7336	32,160.6480	33,985.3816	188.7121	4.6932	40,101.7461
Total	198.2855	38.0954	52.0166	0.2294	0.0000	3.0095	3.0095	0.0000	3.0095	3.0095	9,908.7391	248,630.0161	258,538.7551	674.3363	6.9099	277,456.2997

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	194.3063	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196
Energy	3.9793	36.0994	29.8306	0.2171		2.7493	2.7493		2.7493	2.7493	0.0000	214,408.2521	214,408.2521	7.7997	2.1796	215,252.7526
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,084.0055	0.0000	8,084.0055	477.7510	0.0000	20,027.7814
Water						0.0000	0.0000		0.0000	0.0000	1,824.7336	32,160.6480	33,985.3816	188.7121	4.6932	40,101.7461
Total	198.2855	38.0954	52.0166	0.2294	0.0000	3.0095	3.0095	0.0000	3.0095	3.0095	9,908.7391	248,630.0161	258,538.7551	674.3363	6.9099	277,456.2997

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/28/2776	7/27/2776	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 4.5

Residential Indoor: 6,150,330; Residential Outdoor: 2,050,110; Non-Residential Indoor: 52,359,404; Non-Residential Outdoor: 17,453,135; Striped Parking Area: 11,753 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	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
Architectural Coating	1	3,264.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

3.2 Architectural Coating - 2776

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Mobile Home Park	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Mobile Home Park	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
City Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Enclosed Parking Structure	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
High School	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Industrial Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Junior College (2Yr)	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Mobile Home Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Regional Shopping Center	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Strip Mall	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

5.0 Energy Detail

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Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175,026.9797	175,026.9797	7.0449	1.4576	175,637.4570
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	175,026.9797	175,026.9797	7.0449	1.4576	175,637.4570
NaturalGas Mitigated	3.9793	36.0994	29.8306	0.2171		2.7493	2.7493		2.7493	2.7493	0.0000	39,381.2723	39,381.2723	0.7548	0.7220	39,615.2956
NaturalGas Unmitigated	3.9793	36.0994	29.8306	0.2171		2.7493	2.7493		2.7493	2.7493	0.0000	39,381.2723	39,381.2723	0.7548	0.7220	39,615.2956

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.62523e+006	8.7600e-003	0.0797	0.0669	4.8000e-004		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	86.7284	86.7284	1.6600e-003	1.5900e-003	87.2437
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Mobile Home Park	7.69999e+006	0.0415	0.3548	0.1510	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.9009	410.9009	7.8800e-003	7.5300e-003	413.3426
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9793	36.0995	29.8306	0.2170		2.7493	2.7493		2.7493	2.7493	0.0000	39,381.2723	39,381.2723	0.7548	0.7220	39,615.2956

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.62523e+006	8.7600e-003	0.0797	0.0669	4.8000e-004		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	86.7284	86.7284	1.6600e-003	1.5900e-003	87.2437
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Mobile Home Park	7.69999e+006	0.0415	0.3548	0.1510	2.2600e-003		0.0287	0.0287		0.0287	0.0287	0.0000	410.9009	410.9009	7.8800e-003	7.5300e-003	413.3426
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9793	36.0995	29.8306	0.2170		2.7493	2.7493		2.7493	2.7493	0.0000	39,381.2723	39,381.2723	0.7548	0.7220	39,615.2956

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	1.2828e+006	419.2304	0.0169	3.4900e-003	420.6926
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.50003e+006	490.2226	0.0197	4.0800e-003	491.9324
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Mobile Home Park	1.68529e+006	550.7683	0.0222	4.5900e-003	552.6893
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		175,026.9797	7.0449	1.4576	175,637.4571

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	1.2828e+006	419.2304	0.0169	3.4900e-003	420.6926
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.50003e+006	490.2226	0.0197	4.0800e-003	491.9324
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Mobile Home Park	1.68529e+006	550.7683	0.0222	4.5900e-003	552.6893
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		175,026.9797	7.0449	1.4576	175,637.4571

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	194.3063	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196
Unmitigated	194.3063	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	45.2056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	148.2349					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2047	1.7493	0.7444	0.0112		0.1414	0.1414		0.1414	0.1414	0.0000	2,025.8353	2,025.8353	0.0388	0.0371	2,037.8738
Landscaping	0.6611	0.2467	21.4416	1.1400e-003		0.1188	0.1188		0.1188	0.1188	0.0000	35.2807	35.2807	0.0346	0.0000	36.1457
Total	194.3062	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	45.2056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	148.2349					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2047	1.7493	0.7444	0.0112		0.1414	0.1414		0.1414	0.1414	0.0000	2,025.8353	2,025.8353	0.0388	0.0371	2,037.8738
Landscaping	0.6611	0.2467	21.4416	1.1400e-003		0.1188	0.1188		0.1188	0.1188	0.0000	35.2807	35.2807	0.0346	0.0000	36.1457
Total	194.3062	1.9959	22.1860	0.0123		0.2602	0.2602		0.2602	0.2602	0.0000	2,061.1160	2,061.1160	0.0734	0.0371	2,074.0196

7.0 Water Detail

7.1 Mitigation Measures Water

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	33,985.38 16	188.7121	4.6932	40,101.74 61
Unmitigated	33,985.38 16	188.7121	4.6932	40,101.74 61

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 98.893	359.0650	0.0145	2.9900e-003	360.3174
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	7.8436 / 20.1693	109.0973	0.2599	6.9200e-003	117.6572
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Mobile Home Park	21.1751 / 13.3495	145.2957	0.6956	0.0175	167.8838
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		33,985.3816	188.7121	4.6932	40,101.7461

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 98.893	359.0650	0.0145	2.9900e-003	360.3174
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	7.8436 / 20.1693	109.0973	0.2599	6.9200e-003	117.6572
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Mobile Home Park	21.1751 / 13.3495	145.2957	0.6956	0.0175	167.8838
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		33,985.3816	188.7121	4.6932	40,101.7461

8.0 Waste Detail

8.1 Mitigation Measures Waste

KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8,084.005 5	477.7510	0.0000	20,027.78 14
Unmitigated	8,084.005 5	477.7510	0.0000	20,027.78 14

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	7.14	1.4494	0.0857	0.0000	3.5907
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	307.09	62.3365	3.6840	0.0000	154.4360
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Mobile Home Park	149.5	30.3472	1.7935	0.0000	75.1838
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,084.0055	477.7510	0.0000	20,027.7814

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	7.14	1.4494	0.0857	0.0000	3.5907
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	307.09	62.3365	3.6840	0.0000	154.4360
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Mobile Home Park	149.5	30.3472	1.7935	0.0000	75.1838
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,084.0055	477.7510	0.0000	20,027.7814

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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KMCPU - Adopted Plan (Existing to Remain) - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

KMCPU - Adopted Plan (Proposed New Development)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,882.78	1000sqft	43.22	1,882,783.00	0
Junior College (2Yr)	1,236.66	1000sqft	28.39	1,236,656.00	0
Industrial Park	500.49	1000sqft	11.49	500,490.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Apartments Mid Rise	3,025.00	Dwelling Unit	79.61	3,025,000.00	8652
Regional Shopping Center	129.53	1000sqft	2.97	129,528.00	0
Strip Mall	1,733.17	1000sqft	39.79	1,733,169.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2050
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

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Project Characteristics -

Land Use -

Construction Phase - Not modeling for construction

Vehicle Trips - Mobile emissions calculated outside CalEEMod using EMFAC

Woodstoves - No woodstoves

Fireplaces modeled as natural gas only (90% NG, 10% no fireplace)

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	330.00	0.00
tblConstructionPhase	PhaseEndDate	10/20/2020	7/16/2019
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	1,663.75	2,723.00
tblFireplaces	NumberNoFireplace	302.50	302.00
tblFireplaces	NumberWood	1,058.75	0.00
tblLandUse	LandUseSquareFeet	1,882,780.00	1,882,783.00
tblLandUse	LandUseSquareFeet	1,236,660.00	1,236,656.00
tblLandUse	LandUseSquareFeet	1,733,170.00	1,733,169.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00

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tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	151.25	0.00
tblWoodstoves	NumberNoncatalytic	151.25	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	45.2025	2.1105	23.2004	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827
Energy	0.6454	5.8008	4.4435	0.0352		0.4459	0.4459		0.4459	0.4459	0.0000	32,048.8317	32,048.8317	1.1553	0.3308	32,176.2919
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1,487.2681	0.0000	1,487.2681	87.8950	0.0000	3,684.6438
Water						0.0000	0.0000		0.0000	0.0000	268.4268	5,456.4415	5,724.8683	27.7896	0.6964	6,627.1443
Total	45.8479	7.9113	27.6439	0.0482	0.0000	0.7204	0.7204	0.0000	0.7204	0.7204	1,755.6949	39,686.8312	41,442.5261	116.9163	1.0666	44,683.2627

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	45.2025	2.1105	23.2004	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827
Energy	0.6454	5.8008	4.4435	0.0352		0.4459	0.4459		0.4459	0.4459	0.0000	32,048.8317	32,048.8317	1.1553	0.3308	32,176.2919
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1,115.4511	0.0000	1,115.4511	65.9213	0.0000	2,763.4828
Water						0.0000	0.0000		0.0000	0.0000	214.7414	4,365.1532	4,579.8946	22.2317	0.5571	5,301.7154
Total	45.8479	7.9113	27.6439	0.0482	0.0000	0.7204	0.7204	0.0000	0.7204	0.7204	1,330.1925	38,595.5429	39,925.7354	89.3846	0.9273	42,436.6729

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.24	2.75	3.66	23.55	13.06	5.03

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/17/2019	7/16/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 6,125,625; Residential Outdoor: 2,041,875; Non-Residential Indoor: 8,223,939; Non-Residential Outdoor: 2,741,313; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	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
Architectural Coating	1	829.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

3.2 Architectural Coating - 2019

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
City Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Industrial Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Junior College (2Yr)	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Regional Shopping Center	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Strip Mall	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	25,662.03 16	25,662.03 16	1.0329	0.2137	25,751.53 83
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	25,662.03 16	25,662.03 16	1.0329	0.2137	25,751.53 83
NaturalGas Mitigated	0.6454	5.8008	4.4435	0.0352			0.4459	0.4459		0.4459	0.4459	0.0000	6,386.800 1	6,386.800 1	0.1224	0.1171	6,424.753 7
NaturalGas Unmitigated	0.6454	5.8008	4.4435	0.0352			0.4459	0.4459		0.4459	0.4459	0.0000	6,386.800 1	6,386.800 1	0.1224	0.1171	6,424.753 7

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.24719e+007	0.1212	1.0355	0.4406	6.6100e-003		0.0837	0.0837		0.0837	0.0837	0.0000	1,199.1882	1,199.1882	0.0230	0.0220	1,206.3144
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	3.80134e+007	0.2050	1.8634	1.5653	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,028.5392	2,028.5392	0.0389	0.0372	2,040.5938
Industrial Park	1.01049e+007	0.0545	0.4953	0.4161	2.9700e-003		0.0377	0.0377		0.0377	0.0377	0.0000	539.2356	539.2356	0.0103	9.8900e-003	542.4400
Junior College (2Yr)	4.49401e+007	0.2423	2.2030	1.8505	0.0132		0.1674	0.1674		0.1674	0.1674	0.0000	2,398.1738	2,398.1738	0.0460	0.0440	2,412.4249
Regional Shopping Center	288847	1.5600e-003	0.0142	0.0119	8.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.4140	15.4140	3.0000e-004	2.8000e-004	15.5056
Strip Mall	3.86497e+006	0.0208	0.1895	0.1592	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.2494	206.2494	3.9500e-003	3.7800e-003	207.4750
Total		0.6454	5.8008	4.4435	0.0352		0.4459	0.4459		0.4459	0.4459	0.0000	6,386.8001	6,386.8001	0.1224	0.1171	6,424.7537

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	2.24719e+007	0.1212	1.0355	0.4406	6.6100e-003		0.0837	0.0837		0.0837	0.0837	0.0000	1,199.1882	1,199.1882	0.0230	0.0220	1,206.3144
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	3.80134e+007	0.2050	1.8634	1.5653	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,028.5392	2,028.5392	0.0389	0.0372	2,040.5938
Industrial Park	1.01049e+007	0.0545	0.4953	0.4161	2.9700e-003		0.0377	0.0377		0.0377	0.0377	0.0000	539.2356	539.2356	0.0103	9.8900e-003	542.4400
Junior College (2Yr)	4.49401e+007	0.2423	2.2030	1.8505	0.0132		0.1674	0.1674		0.1674	0.1674	0.0000	2,398.1738	2,398.1738	0.0460	0.0440	2,412.4249
Regional Shopping Center	288847	1.5600e-003	0.0142	0.0119	8.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.4140	15.4140	3.0000e-004	2.8000e-004	15.5056
Strip Mall	3.86497e+006	0.0208	0.1895	0.1592	1.1400e-003		0.0144	0.0144		0.0144	0.0144	0.0000	206.2494	206.2494	3.9500e-003	3.7800e-003	207.4750
Total		0.6454	5.8008	4.4435	0.0352		0.4459	0.4459		0.4459	0.4459	0.0000	6,386.8001	6,386.8001	0.1224	0.1171	6,424.7537

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.21149e+007	3,959.2599	0.1594	0.0330	3,973.0694
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	2.53046e+007	8,269.7663	0.3329	0.0689	8,298.6104
Industrial Park	6.72659e+006	2,198.3071	0.0885	0.0183	2,205.9746
Junior College (2Yr)	1.09815e+007	3,588.8522	0.1445	0.0299	3,601.3698
Regional Shopping Center	1.62687e+006	531.6759	0.0214	4.4300e-003	533.5304
Strip Mall	2.17686e+007	7,114.1702	0.2864	0.0592	7,138.9837
Total		25,662.0316	1.0329	0.2137	25,751.5383

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.21149e+007	3,959.2599	0.1594	0.0330	3,973.0694
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	2.53046e+007	8,269.7663	0.3329	0.0689	8,298.6104
Industrial Park	6.72659e+006	2,198.3071	0.0885	0.0183	2,205.9746
Junior College (2Yr)	1.09815e+007	3,588.8522	0.1445	0.0299	3,601.3698
Regional Shopping Center	1.62687e+006	531.6759	0.0214	4.4300e-003	533.5304
Strip Mall	2.17686e+007	7,114.1702	0.2864	0.0592	7,138.9837
Total		25,662.0316	1.0329	0.2137	25,751.5383

6.0 Area Detail

6.1 Mitigation Measures Area

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	45.2025	2.1105	23.2004	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827
Unmitigated	45.2025	2.1105	23.2004	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	11.0850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	33.2274					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2167	1.8520	0.7881	0.0118		0.1497	0.1497		0.1497	0.1497	0.0000	2,144.7704	2,144.7704	0.0411	0.0393	2,157.5157
Landscaping	0.6734	0.2586	22.4124	1.1900e-003		0.1247	0.1247		0.1247	0.1247	0.0000	36.7876	36.7876	0.0352	0.0000	37.6670
Total	45.2025	2.1105	23.2005	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	11.0850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	33.2274					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.2167	1.8520	0.7881	0.0118		0.1497	0.1497		0.1497	0.1497	0.0000	2,144.7704	2,144.7704	0.0411	0.0393	2,157.5157
Landscaping	0.6734	0.2586	22.4124	1.1900e-003		0.1247	0.1247		0.1247	0.1247	0.0000	36.7876	36.7876	0.0352	0.0000	37.6670
Total	45.2025	2.1105	23.2005	0.0130		0.2745	0.2745		0.2745	0.2745	0.0000	2,181.5580	2,181.5580	0.0763	0.0393	2,195.1827

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4,579.894 6	22.2317	0.5571	5,301.715 4
Unmitigated	5,724.868 3	27.7896	0.6964	6,627.144 3

KMCPU - Adopted Plan (Proposed New Development) - San Diego County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	197.091 / 124.253	1,352.3674	6.4741	0.1624	1,562.6109
City Park	0 / 2.38296	8.6522	3.5000e-004	7.0000e-005	8.6824
General Office Building	334.634 / 205.098	2,274.8347	10.9913	0.2755	2,631.7253
Industrial Park	115.738 / 0	529.2286	3.7912	0.0932	651.7665
Junior College (2Yr)	60.657 / 94.8737	621.8338	2.0008	0.0517	687.2559
Regional Shopping Center	9.59461 / 5.88057	65.2241	0.3151	7.9000e-003	75.4568
Strip Mall	128.38 / 78.6847	872.7275	4.2168	0.1057	1,009.6466
Total		5,724.8683	27.7896	0.6964	6,627.1443

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	157.673 / 99.4024	1,081.8939	5.1793	0.1299	1,250.0887
City Park	0 / 1.90637	6.9217	2.8000e-004	6.0000e-005	6.9459
General Office Building	267.707 / 164.078	1,819.8678	8.7931	0.2204	2,105.3802
Industrial Park	92.5906 / 0	423.3829	3.0329	0.0745	521.4132
Junior College (2Yr)	48.5256 / 75.899	497.4671	1.6006	0.0414	549.8047
Regional Shopping Center	7.67569 / 4.70446	52.1793	0.2521	6.3200e-003	60.3655
Strip Mall	102.704 / 62.9477	698.1820	3.3734	0.0846	807.7172
Total		4,579.8946	22.2317	0.5571	5,301.7154

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,115.451 1	65.9213	0.0000	2,763.482 8
Unmitigated	1,487.268 1	87.8950	0.0000	3,684.643 8

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1391.5	282.4619	16.6930	0.0000	699.7875
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
General Office Building	1750.99	355.4352	21.0056	0.0000	880.5755
Industrial Park	620.61	125.9782	7.4451	0.0000	312.1057
Junior College (2Yr)	1607.66	326.3405	19.2862	0.0000	808.4947
Regional Shopping Center	136.01	27.6088	1.6316	0.0000	68.3996
Strip Mall	1819.83	369.4090	21.8315	0.0000	915.1953
Total		1,487.2681	87.8950	0.0000	3,684.6438

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1043.63	211.8464	12.5198	0.0000	524.8406
City Park	0.1275	0.0259	1.5300e-003	0.0000	0.0641
General Office Building	1313.24	266.5764	15.7542	0.0000	660.4317
Industrial Park	465.457	94.4837	5.5838	0.0000	234.0793
Junior College (2Yr)	1205.75	244.7553	14.4646	0.0000	606.3710
Regional Shopping Center	102.007	20.7066	1.2237	0.0000	51.2997
Strip Mall	1364.87	277.0568	16.3736	0.0000	686.3965
Total		1,115.4511	65.9213	0.0000	2,763.4828

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Adopted KMCP Mobile Emissions

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: San Diego

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Vehicle Class	Fuel	SD Population	% Population	KMCP Population	SD VMT	% VMT	KMCP VMT	SD Trips	% Trips	KMCP Trips
San Diego	All Other Buses	DSL	850	0.02%	25	45,528	0.05%	1,270	-	0.00%	0
San Diego	LDA	GAS	1,793,604	52.20%	53,450	51,627,404	51.27%	1,440,393	11,340,178	53.23%	337,941
San Diego	LDA	DSL	24,990	0.73%	745	720,504	0.72%	20,102	158,131	0.74%	4,712
San Diego	LDA	ELEC	330,257	9.61%	9,842	9,581,514	9.52%	267,322	2,095,811	9.84%	62,456
San Diego	LDT1	GAS	128,354	3.74%	3,825	3,617,314	3.59%	100,922	796,424	3.74%	23,734
San Diego	LDT1	DSL	72	0.00%	2	2,013	0.00%	56	444	0.00%	13
San Diego	LDT1	ELEC	57	0.00%	2	1,621	0.00%	45	356	0.00%	11
San Diego	LDT2	GAS	588,968	17.12%	17,525	17,656,932	17.53%	492,624	3,721,796	17.47%	110,911
San Diego	LDT2	DSL	1,295	0.04%	39	38,906	0.04%	1,085	8,200	0.04%	244
San Diego	LHD1	GAS	11,221	0.33%	334	335,072	0.33%	9,348	167,180	0.78%	4,982
San Diego	LHD1	DSL	26,200	0.76%	781	751,699	0.75%	20,972	329,564	1.55%	9,821
San Diego	LHD2	GAS	4,979	0.14%	148	153,807	0.15%	4,291	74,165	0.35%	2,211
San Diego	LHD2	DSL	12,296	0.36%	366	379,840	0.38%	10,597	154,671	0.73%	4,609
San Diego	MCY	GAS	92,143	2.68%	2,746	554,061	0.55%	15,458	184,267	0.86%	5,491
San Diego	MDV	GAS	330,565	9.62%	9,851	9,402,705	9.34%	262,333	2,056,216	9.65%	61,276
San Diego	MDV	DSL	9,428	0.27%	281	269,940	0.27%	7,531	58,881	0.28%	1,755
San Diego	MH	GAS	7,123	0.21%	212	52,492	0.05%	1,465	713	0.00%	21
San Diego	MH	DSL	2,005	0.06%	60	14,740	0.01%	411	200	0.00%	6
San Diego	Motor Coach	DSL	361	0.01%	11	46,685	0.05%	1,303	-	0.00%	0
San Diego	OBUS	GAS	2,456	0.07%	73	110,723	0.11%	3,089	49,147	0.23%	1,465
San Diego	PTO	DSL	-	0.00%	0	48,221	0.05%	1,345	-	0.00%	0
San Diego	SBUS	GAS	830	0.02%	25	33,261	0.03%	928	3,319	0.02%	99
San Diego	SBUS	DSL	1,395	0.04%	42	47,180	0.05%	1,316	-	0.00%	0
San Diego	T6 Ag	DSL	266	0.01%	8	3,929	0.00%	110	-	0.00%	0
San Diego	T6 CAIRP heavy	DSL	70	0.00%	2	3,158	0.00%	88	-	0.00%	0
San Diego	T6 CAIRP small	DSL	177	0.01%	5	9,695	0.01%	270	-	0.00%	0
San Diego	T6 instate construction heavy	DSL	956	0.03%	28	73,804	0.07%	2,059	-	0.00%	0
San Diego	T6 instate construction small	DSL	4,379	0.13%	130	198,268	0.20%	5,532	-	0.00%	0
San Diego	T6 instate heavy	DSL	8,591	0.25%	256	434,840	0.43%	12,132	-	0.00%	0
San Diego	T6 instate small	DSL	22,317	0.65%	665	1,096,430	1.09%	30,590	-	0.00%	0
San Diego	T6 OOS heavy	DSL	40	0.00%	1	1,810	0.00%	50	-	0.00%	0
San Diego	T6 OOS small	DSL	102	0.00%	3	5,555	0.01%	155	-	0.00%	0
San Diego	T6 Public	DSL	2,697	0.08%	80	45,074	0.04%	1,258	-	0.00%	0
San Diego	T6 utility	DSL	344	0.01%	10	6,478	0.01%	181	-	0.00%	0
San Diego	T6TS	GAS	4,640	0.14%	138	203,127	0.20%	5,667	92,840	0.44%	2,767
San Diego	T7 Ag	DSL	244	0.01%	7	2,922	0.00%	82	-	0.00%	0
San Diego	T7 CAIRP	DSL	1,982	0.06%	59	483,143	0.48%	13,480	-	0.00%	0
San Diego	T7 CAIRP construction	DSL	260	0.01%	8	52,356	0.05%	1,461	-	0.00%	0
San Diego	T7 NNCOOS	DSL	2,529	0.07%	75	899,098	0.89%	16,715	-	0.00%	0
San Diego	T7 NNCOOS	DSL	783	0.02%	23	199,841	0.19%	5,324	-	0.00%	0
San Diego	T7 other port	DSL	838	0.02%	25	149,856	0.15%	4,181	-	0.00%	0
San Diego	T7 POLA	DSL	497	0.01%	15	106,599	0.11%	2,974	-	0.00%	0
San Diego	T7 Public	DSL	1,418	0.04%	42	32,496	0.03%	907	-	0.00%	0
San Diego	T7 Single	DSL	2,054	0.06%	62	242,848	0.24%	6,775	-	0.00%	0
San Diego	T7 single construction	DSL	1,440	0.04%	43	135,439	0.13%	3,779	-	0.00%	0
San Diego	T7 SWCV	DSL	2,184	0.06%	65	100,623	0.10%	2,807	-	0.00%	0
San Diego	T7 tractor	DSL	5,625	0.16%	168	733,911	0.73%	20,476	-	0.00%	0
San Diego	T7 tractor construction	DSL	1,212	0.04%	36	100,980	0.10%	2,817	-	0.00%	0
San Diego	T7 utility	DSL	146	0.00%	4	3,328	0.00%	93	-	0.00%	0
San Diego	T7IS	GAS	261	0.01%	8	27,238	0.03%	760	5,222	0.02%	156
San Diego	UBUS	GAS	679	0.02%	20	80,825	0.08%	2,255	2,718	0.01%	81
San Diego	UBUS	DSL	669	0.02%	20	79,601	0.08%	2,221	2,676	0.01%	80
			3,435,960		102,393	100,696,455		2,809,408	21,303,139		634,840

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

KMCPU - Proposed Plan (Existing to Remain)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	144.00	Dwelling Unit	46.75	259,200.00	412
Apartments Mid Rise	2,388.00	Dwelling Unit	62.84	2,388,000.00	6830
Junior College (2Yr)	3,335.52	1000sqft	76.57	3,335,516.00	0
High School	248.34	1000sqft	5.70	248,339.00	0
General Office Building	11,654.23	1000sqft	267.54	11,654,234.00	0
Strip Mall	7,244.10	1000sqft	166.30	7,244,096.00	0
Regional Shopping Center	571.03	1000sqft	13.11	571,027.00	0
Industrial Park	11,865.17	1000sqft	272.39	11,865,171.00	0
City Park	78.13	Acre	78.13	3,403,342.80	0
Enclosed Parking Structure	145.53	1000sqft	3.34	145,533.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2050
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

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Project Characteristics -

Land Use -

Construction Phase - Not modeling for construction

Vehicle Trips - Mobile emissions modeled outside of CalEEMod using EMFAC

Woodstoves - No woodstoves

Fireplaces modeled as natural gas only (90% NG, 10% no fireplace)

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	1,100.00	0.00
tblConstructionPhase	PhaseEndDate	11/12/2099	8/25/2095
tblEnergyUse	LightingElect	2.63	2.63
tblEnergyUse	T24E	200.21	200.21
tblEnergyUse	T24E	3.92	3.92
tblEnergyUse	T24E	550.61	550.61
tblEnergyUse	T24NG	4,108.03	4,108.03
tblEnergyUse	T24NG	24,260.55	24,260.55
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	1,313.40	2,149.00
tblFireplaces	NumberGas	79.20	130.00
tblFireplaces	NumberNoFireplace	238.80	239.00
tblFireplaces	NumberNoFireplace	14.40	14.00
tblFireplaces	NumberWood	835.80	0.00
tblFireplaces	NumberWood	50.40	0.00
tblLandUse	LandUseSquareFeet	3,335,520.00	3,335,516.00
tblLandUse	LandUseSquareFeet	11,654,200.00	11,654,234.00
tblLandUse	LandUseSquareFeet	7,244,100.00	7,244,096.00

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tblLandUse	LandUseSquareFeet	11,865,200.00	11,865,171.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	9.52	0.00

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tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	119.40	0.00
tblWoodstoves	NumberCatalytic	7.20	0.00
tblWoodstoves	NumberNoncatalytic	119.40	0.00
tblWoodstoves	NumberNoncatalytic	7.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303
Energy	3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	213,368.4184	213,368.4184	7.7664	2.1668	214,208.2944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,056.7702	0.0000	8,056.7702	476.1415	0.0000	19,960.3071
Water						0.0000	0.0000		0.0000	0.0000	1,818.1434	32,006.4721	33,824.6155	188.0290	4.6759	39,918.7575
Total	196.0704	37.5176	49.3813	0.2257	0.0000	2.9517	2.9517	0.0000	2.9517	2.9517	9,874.9136	247,201.2824	257,076.1960	672.0022	6.8756	275,925.1893

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303
Energy	3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	213,368.4184	213,368.4184	7.7664	2.1668	214,208.2944
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	8,056.7702	0.0000	8,056.7702	476.1415	0.0000	19,960.3071
Water						0.0000	0.0000		0.0000	0.0000	1,818.1434	32,006.4721	33,824.6155	188.0290	4.6759	39,918.7575
Total	196.0704	37.5176	49.3813	0.2257	0.0000	2.9517	2.9517	0.0000	2.9517	2.9517	9,874.9136	247,201.2824	257,076.1960	672.0022	6.8756	275,925.1893

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	8/26/2095	8/25/2095	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 3.34

Residential Indoor: 5,360,580; Residential Outdoor: 1,786,860; Non-Residential Indoor: 52,377,575; Non-Residential Outdoor: 17,459,192; Striped Parking Area: 8,732 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	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
Architectural Coating	1	3,196.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2095

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
City Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Enclosed Parking Structure	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
High School	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Industrial Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Junior College (2Yr)	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Regional Shopping Center	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Single Family Housing	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Strip Mall	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	174,393.5993	174,393.5993	7.0194	1.4523	175,001.8675
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	174,393.5993	174,393.5993	7.0194	1.4523	175,001.8675
NaturalGas Mitigated	3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	38,974.8191	38,974.8191	0.7470	0.7145	39,206.4269
NaturalGas Unmitigated	3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	38,974.8191	38,974.8191	0.7470	0.7145	39,206.4269

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.70857e+006	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.1759	91.1759	1.7500e-003	1.6700e-003	91.7177
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	38,974.8191	38,974.8191	0.7470	0.7146	39,206.4269

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.37788e+007	0.0743	0.6349	0.2702	4.0500e-003		0.0513	0.0513		0.0513	0.0513	0.0000	735.2912	735.2912	0.0141	0.0135	739.6606
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	2.74574e+008	1.4805	13.4595	11.3060	0.0808		1.0229	1.0229		1.0229	1.0229	0.0000	14,652.3011	14,652.3011	0.2808	0.2686	14,739.3724
High School	1.70857e+006	9.2100e-003	0.0838	0.0704	5.0000e-004		6.3700e-003	6.3700e-003		6.3700e-003	6.3700e-003	0.0000	91.1759	91.1759	1.7500e-003	1.6700e-003	91.7177
Industrial Park	2.79543e+008	1.5073	13.7031	11.5106	0.0822		1.0414	1.0414		1.0414	1.0414	0.0000	14,917.5019	14,917.5019	0.2859	0.2735	15,006.1492
Junior College (2Yr)	1.3759e+008	0.7419	6.7446	5.6655	0.0405		0.5126	0.5126		0.5126	0.5126	0.0000	7,342.3282	7,342.3282	0.1407	0.1346	7,385.9600
Regional Shopping Center	1.37618e+006	7.4200e-003	0.0675	0.0567	4.0000e-004		5.1300e-003	5.1300e-003		5.1300e-003	5.1300e-003	0.0000	73.4379	73.4379	1.4100e-003	1.3500e-003	73.8744
Single Family Housing	4.33145e+006	0.0234	0.1996	0.0849	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	231.1429	231.1429	4.4300e-003	4.2400e-003	232.5165
Strip Mall	1.74583e+007	0.0941	0.8558	0.7189	5.1300e-003		0.0650	0.0650		0.0650	0.0650	0.0000	931.6398	931.6398	0.0179	0.0171	937.1761
Total		3.9382	35.7487	29.6831	0.2148		2.7210	2.7210		2.7210	2.7210	0.0000	38,974.8191	38,974.8191	0.7470	0.7146	39,206.4269

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	953092	311.4789	0.0125	2.5900e-003	312.5653
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.57695e+006	515.3620	0.0207	4.2900e-003	517.1595
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		174,393.5993	7.0194	1.4523	175,001.8675

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.34728e+006	2,727.9647	0.1098	0.0227	2,737.4795
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	953092	311.4789	0.0125	2.5900e-003	312.5653
General Office Building	1.83438e+008	59,949.0299	2.4130	0.4992	60,158.1264
High School	1.57695e+006	515.3620	0.0207	4.2900e-003	517.1595
Industrial Park	1.86758e+008	61,034.0835	2.4567	0.5083	61,246.9646
Junior College (2Yr)	3.59235e+007	11,740.1171	0.4725	0.0978	11,781.0655
Regional Shopping Center	8.44549e+006	2,760.0600	0.1111	0.0230	2,769.6868
Single Family Housing	1.04389e+006	341.1533	0.0137	2.8400e-003	342.3432
Strip Mall	1.0714e+008	35,014.3500	1.4093	0.2916	35,136.4767
Total		174,393.5993	7.0194	1.4523	175,001.8675

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303
Unmitigated	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	44.6078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	146.7538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1814	1.5500	0.6596	9.8900e-003		0.1253	0.1253		0.1253	0.1253	0.0000	1,795.0539	1,795.0539	0.0344	0.0329	1,805.7210
Landscaping	0.5892	0.2189	19.0387	1.0200e-003		0.1054	0.1054		0.1054	0.1054	0.0000	31.3381	31.3381	0.0309	0.0000	32.1093
Total	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	44.6078					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	146.7538					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1814	1.5500	0.6596	9.8900e-003		0.1253	0.1253		0.1253	0.1253	0.0000	1,795.0539	1,795.0539	0.0344	0.0329	1,805.7210
Landscaping	0.5892	0.2189	19.0387	1.0200e-003		0.1054	0.1054		0.1054	0.1054	0.0000	31.3381	31.3381	0.0309	0.0000	32.1093
Total	192.1322	1.7689	19.6982	0.0109		0.2307	0.2307		0.2307	0.2307	0.0000	1,826.3920	1,826.3920	0.0653	0.0329	1,837.8303

7.0 Water Detail

7.1 Mitigation Measures Water

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	33,824.61 55	188.0290	4.6759	39,918.75 75
Unmitigated	33,824.61 55	188.0290	4.6759	39,918.75 75

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 93.0904	337.9970	0.0136	2.8100e-003	339.1759
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	8.24604 / 21.2041	114.6949	0.2732	7.2800e-003	123.6939
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		33,824.6155	188.0290	4.6759	39,918.7575

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	155.588 / 98.088	1,067.5879	5.1108	0.1282	1,233.5586
City Park	0 / 93.0904	337.9970	0.0136	2.8100e-003	339.1759
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
General Office Building	2071.34 / 1269.53	14,080.9754	68.0351	1.7055	16,290.0884
High School	8.24604 / 21.2041	114.6949	0.2732	7.2800e-003	123.6939
Industrial Park	2743.83 / 0	12,546.5102	89.8776	2.2083	15,451.5368
Junior College (2Yr)	163.604 / 255.893	1,677.2105	5.3965	0.1394	1,853.6669
Regional Shopping Center	42.2976 / 25.9244	287.5388	1.3893	0.0348	332.6497
Single Family Housing	9.38218 / 5.91485	64.3772	0.3082	7.7300e-003	74.3854
Strip Mall	536.589 / 328.877	3,647.7237	17.6247	0.4418	4,220.0018
Total		33,824.6155	188.0290	4.6759	39,918.7575

8.0 Waste Detail

8.1 Mitigation Measures Waste

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8,056.770 2	476.1415	0.0000	19,960.30 71
Unmitigated	8,056.770 2	476.1415	0.0000	19,960.30 71

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	6.72	1.3641	0.0806	0.0000	3.3795
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	322.84	65.5336	3.8729	0.0000	162.3567
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,056.7702	476.1415	0.0000	19,960.3071

KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	1098.48	222.9815	13.1778	0.0000	552.4273
City Park	6.72	1.3641	0.0806	0.0000	3.3795
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
General Office Building	10838.4	2,200.0993	130.0221	0.0000	5,450.6529
High School	322.84	65.5336	3.8729	0.0000	162.3567
Industrial Park	14712.9	2,986.5756	176.5016	0.0000	7,399.1146
Junior College (2Yr)	4336.18	880.2054	52.0187	0.0000	2,180.6715
Regional Shopping Center	599.58	121.7093	7.1928	0.0000	301.5297
Single Family Housing	168.92	34.2892	2.0264	0.0000	84.9501
Strip Mall	7606.31	1,544.0122	91.2485	0.0000	3,825.2249
Total		8,056.7702	476.1415	0.0000	19,960.3071

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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KMCPU - Proposed Plan (Existing to Remain) - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

KMCPU - Proposed Plan (Proposed New Development)
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	23,294.00	Dwelling Unit	613.00	23,294,000.00	66621
Junior College (2Yr)	6.10	1000sqft	0.14	6,097.00	0
High School	1,048.48	1000sqft	24.07	1,048,475.00	0
General Office Building	9,059.45	1000sqft	207.98	9,059,448.00	0
Strip Mall	4,852.94	1000sqft	111.41	4,852,943.00	0
Regional Shopping Center	285.11	1000sqft	6.55	285,108.00	0
Industrial Park	7,224.58	1000sqft	165.85	7,224,579.00	0
City Park	1.87	Acre	1.87	81,457.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2050
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

Project Characteristics -

Land Use -

Construction Phase - Not modeling for construction

Vehicle Trips - Mobile emissions calculated outside CalEEMod using EMFAC

Woodstoves - No woodstoves

Fireplaces modeled as natural gas only (90% NG, 10% no fireplace)

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	11,000.00	0.00
tblConstructionPhase	PhaseEndDate	2/21/2819	12/23/2776
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	12,811.70	20,965.00
tblFireplaces	NumberNoFireplace	2,329.40	2,329.00
tblFireplaces	NumberWood	8,152.90	0.00
tblLandUse	LandUseSquareFeet	1,048,470.00	1,048,475.00
tblLandUse	LandUseSquareFeet	9,059,450.00	9,059,448.00
tblLandUse	LandUseSquareFeet	4,852,940.00	4,852,943.00
tblLandUse	LandUseSquareFeet	7,224,580.00	7,224,579.00
tblVehicleTrips	ST_TR	6.39	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	4.37	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	11.23	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	ST_TR	42.04	0.00

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tblVehicleTrips	SU_TR	5.86	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.79	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.21	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.65	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	12.89	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	27.49	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	1,164.70	0.00
tblWoodstoves	NumberNoncatalytic	1,164.70	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859
Energy	2.8023	24.9668	17.6673	0.1529		1.9362	1.9362		1.9362	1.9362	0.0000	152,649.6806	152,649.6806	5.5595	1.5487	153,250.1825
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	7,077.2941	0.0000	7,077.2941	418.2561	0.0000	17,533.6967
Water						0.0000	0.0000		0.0000	0.0000	1,654.2421	30,427.6188	32,081.8609	171.1313	4.2653	37,631.1874
Total	250.8820	41.2150	196.1409	0.2530	0.0000	4.0489	4.0489	0.0000	4.0489	4.0489	8,731.5362	199,873.3074	208,604.8436	595.5333	6.1167	225,315.9524

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859
Energy	2.8023	24.9668	17.6673	0.1529		1.9362	1.9362		1.9362	1.9362	0.0000	152,649.6806	152,649.6806	5.5595	1.5487	153,250.1825
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	5,307.9706	0.0000	5,307.9706	313.6921	0.0000	13,150.2725
Water						0.0000	0.0000		0.0000	0.0000	1,323.3937	24,342.0950	25,665.4887	136.9050	3.4122	30,104.9499
Total	250.8820	41.2150	196.1409	0.2530	0.0000	4.0489	4.0489	0.0000	4.0489	4.0489	6,631.3643	193,787.7837	200,419.1479	456.7430	5.2637	213,406.2908

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.05	3.04	3.92	23.31	13.95	5.29

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/24/2776	12/23/2776	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 47,170,350; Residential Outdoor: 15,723,450; Non-Residential Indoor: 33,714,975; Non-Residential Outdoor: 11,238,325; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	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
Architectural Coating	1	4,965.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2776

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
High School	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Junior College (2Yr)	0.00	0.00	0.00		
Regional Shopping Center	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
High School	9.50	7.30	7.30	77.80	17.20	5.00	75	19	6
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Junior College (2Yr)	9.50	7.30	7.30	6.40	88.60	5.00	92	7	1
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
City Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
General Office Building	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
High School	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Industrial Park	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Junior College (2Yr)	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Regional Shopping Center	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668
Strip Mall	0.615011	0.035959	0.175734	0.096057	0.010793	0.005300	0.020678	0.029891	0.002015	0.001593	0.005502	0.000799	0.000668

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	124,916.1911	124,916.1911	5.0279	1.0403	125,351.8868
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	124,916.1911	124,916.1911	5.0279	1.0403	125,351.8868
NaturalGas Mitigated	2.8023	24.9668	17.6673	0.1529			1.9362	1.9362		1.9362	1.9362	0.0000	27,733.4895	27,733.4895	0.5316	0.5085	27,898.2957
NaturalGas Unmitigated	2.8023	24.9668	17.6673	0.1529			1.9362	1.9362		1.9362	1.9362	0.0000	27,733.4895	27,733.4895	0.5316	0.5085	27,898.2957

KMCPU - Proposed Plan (Proposed New Development) - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.73045e+008	0.9331	7.9737	3.3930	0.0509		0.6447	0.6447		0.6447	0.6447	0.0000	9,234.3439	9,234.3439	0.1770	0.1693	9,289.2190
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.8291e+008	0.9863	8.9662	7.5316	0.0538		0.6814	0.6814		0.6814	0.6814	0.0000	9,760.7878	9,760.7878	0.1871	0.1790	9,818.7913
High School	6.20697e+006	0.0335	0.3043	0.2556	1.8300e-003		0.0231	0.0231		0.0231	0.0231	0.0000	331.2277	331.2277	6.3500e-003	6.0700e-003	333.1960
Industrial Park	1.45864e+008	0.7865	7.1502	6.0062	0.0429		0.5434	0.5434		0.5434	0.5434	0.0000	7,783.8719	7,783.8719	0.1492	0.1427	7,830.1275
Junior College (2Yr)	221565	1.1900e-003	0.0109	9.1200e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8236	11.8236	2.3000e-004	2.2000e-004	11.8938
Regional Shopping Center	635791	3.4300e-003	0.0312	0.0262	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9282	33.9282	6.5000e-004	6.2000e-004	34.1298
Strip Mall	1.08221e+007	0.0584	0.5305	0.4456	3.1800e-003		0.0403	0.0403		0.0403	0.0403	0.0000	577.5065	577.5065	0.0111	0.0106	580.9383
Total		2.8023	24.9668	17.6673	0.1529		1.9362	1.9362		1.9362	1.9362	0.0000	27,733.4895	27,733.4895	0.5316	0.5085	27,898.2957

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.73045e+008	0.9331	7.9737	3.3930	0.0509		0.6447	0.6447		0.6447	0.6447	0.0000	9,234.3439	9,234.3439	0.1770	0.1693	9,289.2190
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.8291e+008	0.9863	8.9662	7.5316	0.0538		0.6814	0.6814		0.6814	0.6814	0.0000	9,760.7878	9,760.7878	0.1871	0.1790	9,818.7913
High School	6.20697e+006	0.0335	0.3043	0.2556	1.8300e-003		0.0231	0.0231		0.0231	0.0231	0.0000	331.2277	331.2277	6.3500e-003	6.0700e-003	333.1960
Industrial Park	1.45864e+008	0.7865	7.1502	6.0062	0.0429		0.5434	0.5434		0.5434	0.5434	0.0000	7,783.8719	7,783.8719	0.1492	0.1427	7,830.1275
Junior College (2Yr)	221565	1.1900e-003	0.0109	9.1200e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8236	11.8236	2.3000e-004	2.2000e-004	11.8938
Regional Shopping Center	635791	3.4300e-003	0.0312	0.0262	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.9282	33.9282	6.5000e-004	6.2000e-004	34.1298
Strip Mall	1.08221e+007	0.0584	0.5305	0.4456	3.1800e-003		0.0403	0.0403		0.0403	0.0403	0.0000	577.5065	577.5065	0.0111	0.0106	580.9383
Total		2.8023	24.9668	17.6673	0.1529		1.9362	1.9362		1.9362	1.9362	0.0000	27,733.4895	27,733.4895	0.5316	0.5085	27,898.2957

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	9.32908e+007	30,488.2642	1.2272	0.2539	30,594.6043
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.21759e+008	39,791.9025	1.6016	0.3314	39,930.6928
High School	5.49401e+006	1,795.4903	0.0723	0.0150	1,801.7528
Industrial Park	9.70983e+007	31,732.5893	1.2773	0.2643	31,843.2695
Junior College (2Yr)	54141.4	17.6939	7.1000e-004	1.5000e-004	17.7556
Regional Shopping Center	3.58096e+006	1,170.2880	0.0471	9.7500e-003	1,174.3698
Strip Mall	6.0953e+007	19,919.9630	0.8018	0.1659	19,989.4419
Total		124,916.1911	5.0279	1.0403	125,351.8868

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	9.32908e+007	30,488.2642	1.2272	0.2539	30,594.6043
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	1.21759e+008	39,791.9025	1.6016	0.3314	39,930.6928
High School	5.49401e+006	1,795.4903	0.0723	0.0150	1,801.7528
Industrial Park	9.70983e+007	31,732.5893	1.2773	0.2643	31,843.2695
Junior College (2Yr)	54141.4	17.6939	7.1000e-004	1.5000e-004	17.7556
Regional Shopping Center	3.58096e+006	1,170.2880	0.0471	9.7500e-003	1,174.3698
Strip Mall	6.0953e+007	19,919.9630	0.8018	0.1659	19,989.4419
Total		124,916.1911	5.0279	1.0403	125,351.8868

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859
Unmitigated	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	62.4839					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	178.7580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6686	14.2587	6.0675	0.0910		1.1528	1.1528		1.1528	1.1528	0.0000	16,513.0783	16,513.0783	0.3165	0.3027	16,611.2072
Landscaping	5.1692	1.9895	172.4060	9.1500e-003		0.9599	0.9599		0.9599	0.9599	0.0000	282.9298	282.9298	0.2700	0.0000	289.6787
Total	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	62.4839					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	178.7580					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.6686	14.2587	6.0675	0.0910		1.1528	1.1528		1.1528	1.1528	0.0000	16,513.0783	16,513.0783	0.3165	0.3027	16,611.2072
Landscaping	5.1692	1.9895	172.4060	9.1500e-003		0.9599	0.9599		0.9599	0.9599	0.0000	282.9298	282.9298	0.2700	0.0000	289.6787
Total	248.0797	16.2482	178.4736	0.1002		2.1127	2.1127		2.1127	2.1127	0.0000	16,796.0081	16,796.0081	0.5865	0.3027	16,900.8859

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25,665.48 87	136.9050	3.4122	30,104.94 99
Unmitigated	32,081.86 09	171.1313	4.2653	37,631.18 74

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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1517.7 / 956.81	10,413.8995	49.8540	1.2504	12,032.8788
City Park	0 / 2.22807	8.0898	3.3000e-004	7.0000e-005	8.1180
General Office Building	1610.17 / 986.878	10,945.9158	52.8874	1.3258	12,663.1808
High School	34.8141 / 89.5219	484.2320	1.1535	0.0307	522.2251
Industrial Park	1670.68 / 0	7,639.4217	54.7254	1.3446	9,408.2581
Junior College (2Yr)	0.299199 / 0.467978	3.0673	9.8700e-003	2.5000e-004	3.3900
Regional Shopping Center	21.1188 / 12.9438	143.5655	0.6937	0.0174	166.0889
Strip Mall	359.47 / 220.32	2,443.6693	11.8071	0.2960	2,827.0476
Total		32,081.8609	171.1313	4.2653	37,631.1874

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1214.16 / 765.448	8,331.1196	39.8832	1.0004	9,626.3031
City Park	0 / 1.78246	6.4718	2.6000e-004	5.0000e-005	6.4944
General Office Building	1288.14 / 789.503	8,756.7327	42.3099	1.0606	10,130.5446
High School	27.8513 / 71.6175	387.3856	0.9228	0.0246	417.7801
Industrial Park	1336.55 / 0	6,111.5374	43.7803	1.0757	7,526.6065
Junior College (2Yr)	0.239359 / 0.374382	2.4538	7.9000e-003	2.0000e-004	2.7120
Regional Shopping Center	16.8951 / 10.355	114.8524	0.5549	0.0139	132.8711
Strip Mall	287.576 / 176.256	1,954.9354	9.4457	0.2368	2,261.6381
Total		25,665.4887	136.9050	3.4122	30,104.9499

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5,307.970 6	313.6921	0.0000	13,150.27 25
Unmitigated	7,077.294 1	418.2561	0.0000	17,533.69 67

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	10715.2	2,175.0969	128.5445	0.0000	5,388.7105
City Park	0.16	0.0325	1.9200e-003	0.0000	0.0805
General Office Building	8425.29	1,710.2577	101.0733	0.0000	4,237.0911
High School	1363.01	276.6787	16.3512	0.0000	685.4598
Industrial Park	8958.48	1,818.4905	107.4697	0.0000	4,505.2332
Junior College (2Yr)	7.93	1.6097	0.0951	0.0000	3.9880
Regional Shopping Center	299.37	60.7694	3.5914	0.0000	150.5536
Strip Mall	5095.59	1,034.3587	61.1289	0.0000	2,562.5800
Total		7,077.2941	418.2561	0.0000	17,533.6967

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	8036.43	1,631.3227	96.4084	0.0000	4,041.5329
City Park	0.12	0.0244	1.4400e-003	0.0000	0.0604
General Office Building	6318.97	1,282.6933	75.8050	0.0000	3,177.8184
High School	1022.26	207.5090	12.2634	0.0000	514.0949
Industrial Park	6718.86	1,363.8679	80.6023	0.0000	3,378.9249
Junior College (2Yr)	5.9475	1.2073	0.0714	0.0000	2.9910
Regional Shopping Center	224.528	45.5771	2.6935	0.0000	112.9152
Strip Mall	3821.69	775.7690	45.8466	0.0000	1,921.9350
Total		5,307.9706	313.6921	0.0000	13,150.2725

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Proposed KMCPU Mobile Emissions

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: San Diego

Calendar Year: 2050

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	Vehicle Class	Fuel	SD Population	% Population	KMCP Population	SD VMT	% VMT	KMCP VMT	SD Trips	% Trips	KMCP Trips
San Diego	All Other Buses	DSL	850	0.02%	36	45,528	0.05%	1,672	-	0.00%	0
San Diego	LDA	GAS	1,793,604	52.20%	75,128	51,627,404	51.27%	1,896,247	11,340,178	53.23%	475,002
San Diego	LDA	DSL	24,990	0.73%	1,047	720,504	0.72%	26,464	158,131	0.74%	6,624
San Diego	LDA	ELEC	330,257	9.61%	13,833	9,581,514	9.52%	351,924	2,095,811	9.84%	87,787
San Diego	LDT1	GAS	128,354	3.74%	5,376	3,617,314	3.59%	132,862	796,424	3.74%	33,360
San Diego	LDT1	DSL	72	0.00%	3	2,013	0.00%	74	444	0.00%	19
San Diego	LDT1	ELEC	57	0.00%	2	1,621	0.00%	60	356	0.00%	15
San Diego	LDT2	GAS	588,968	17.12%	24,632	17,656,932	17.53%	648,530	3,721,796	17.47%	155,894
San Diego	LDT2	DSL	1,295	0.04%	54	38,906	0.04%	1,429	8,200	0.04%	343
San Diego	LHD1	GAS	11,221	0.33%	470	335,072	0.33%	12,307	167,180	0.78%	7,003
San Diego	LHD1	DSL	26,200	0.76%	1,097	751,699	0.75%	27,609	329,564	1.55%	13,804
San Diego	LHD2	GAS	4,979	0.14%	209	153,307	0.15%	5,649	74,165	0.35%	3,107
San Diego	LHD2	DSL	12,296	0.36%	515	379,840	0.38%	13,951	154,671	0.73%	6,479
San Diego	MCY	GAS	92,143	2.68%	3,860	554,061	0.55%	20,350	184,267	0.86%	7,718
San Diego	MDV	GAS	330,565	9.62%	13,846	9,402,705	9.34%	345,356	2,056,216	9.65%	86,128
San Diego	MDV	DSL	9,428	0.27%	395	269,940	0.27%	9,915	58,881	0.28%	2,466
San Diego	MH	GAS	7,123	0.21%	298	52,492	0.05%	1,928	713	0.00%	30
San Diego	MH	DSL	2,005	0.06%	84	14,740	0.01%	541	200	0.00%	8
San Diego	Motor Coach	DSL	361	0.01%	15	46,685	0.05%	1,715	-	0.00%	0
San Diego	OBUS	GAS	2,456	0.07%	103	110,723	0.11%	4,067	49,147	0.23%	2,059
San Diego	PTO	DSL	-	0.00%	0	48,221	0.05%	1,771	-	0.00%	0
San Diego	SBUS	GAS	830	0.02%	35	33,261	0.03%	1,222	3,319	0.02%	139
San Diego	SBUS	DSL	1,395	0.04%	58	47,180	0.05%	1,733	-	0.00%	0
San Diego	T6 Ag	DSL	266	0.01%	11	3,929	0.00%	144	-	0.00%	0
San Diego	T6 CAIRP heavy	DSL	70	0.00%	3	3,158	0.00%	116	-	0.00%	0
San Diego	T6 CAIRP small	DSL	177	0.01%	7	9,695	0.01%	356	-	0.00%	0
San Diego	T6 instate construction heavy	DSL	956	0.03%	40	73,804	0.07%	2,711	-	0.00%	0
San Diego	T6 instate construction small	DSL	4,379	0.13%	183	198,268	0.20%	7,282	-	0.00%	0
San Diego	T6 instate heavy	DSL	8,591	0.25%	360	434,840	0.43%	15,971	-	0.00%	0
San Diego	T6 instate small	DSL	22,317	0.65%	935	1,096,430	1.09%	40,271	-	0.00%	0
San Diego	T6 OOS heavy	DSL	40	0.00%	2	1,810	0.00%	66	-	0.00%	0
San Diego	T6 OOS small	DSL	102	0.00%	4	5,555	0.01%	204	-	0.00%	0
San Diego	T6 Public	DSL	2,697	0.08%	113	45,074	0.04%	1,656	-	0.00%	0
San Diego	T6 utility	DSL	344	0.01%	14	6,478	0.01%	238	-	0.00%	0
San Diego	T6TS	GAS	4,640	0.14%	194	203,127	0.20%	7,461	92,840	0.44%	3,889
San Diego	T7 Ag	DSL	244	0.01%	10	2,922	0.00%	107	-	0.00%	0
San Diego	T7 CAIRP	DSL	1,982	0.06%	83	483,143	0.48%	17,746	-	0.00%	0
San Diego	T7 CAIRP construction	DSL	260	0.01%	11	52,356	0.05%	1,923	-	0.00%	0
San Diego	T7 NNCOOS	DSL	2,529	0.07%	106	896,098	0.89%	22,005	-	0.00%	0
San Diego	T7 NCOOS	DSL	783	0.02%	33	199,841	0.19%	7,009	-	0.00%	0
San Diego	T7 other port	DSL	838	0.02%	35	149,856	0.15%	5,504	-	0.00%	0
San Diego	T7 POLA	DSL	497	0.01%	21	106,599	0.11%	3,915	-	0.00%	0
San Diego	T7 Public	DSL	1,418	0.04%	59	32,496	0.03%	1,194	-	0.00%	0
San Diego	T7 Single	DSL	2,054	0.06%	86	242,848	0.24%	8,920	-	0.00%	0
San Diego	T7 single construction	DSL	1,440	0.04%	60	135,439	0.13%	4,975	-	0.00%	0
San Diego	T7 SWCV	DSL	2,184	0.06%	91	100,623	0.10%	3,696	-	0.00%	0
San Diego	T7 tractor	DSL	5,625	0.16%	236	733,911	0.73%	26,956	-	0.00%	0
San Diego	T7 tractor construction	DSL	1,212	0.04%	51	100,980	0.10%	3,709	-	0.00%	0
San Diego	T7 utility	DSL	146	0.00%	6	3,328	0.00%	122	-	0.00%	0
San Diego	T7IS	GAS	261	0.01%	11	27,238	0.03%	1,000	5,222	0.02%	219
San Diego	UBUS	GAS	679	0.02%	28	80,825	0.08%	2,969	2,718	0.01%	114
San Diego	UBUS	DSL	669	0.02%	28	79,601	0.08%	2,924	2,676	0.01%	112
			3,435,960		143,921	100,696,455		3,698,527	21,303,139		892,317

