



**Air Quality Analysis for the
Santa Fe Flores Project
San Marcos, California**

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Acronyms and Abbreviations

°C	degrees Celsius
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of San Marcos
CO	carbon monoxide
DPM	diesel particulate matter
FAR	floor area ratio
General Plan	City of San Marcos General Plan
NAAQS	National Ambient Air Quality Standards
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
O ₃	oxygen
OEHHA	Office of Environmental Health Hazard Assessment
PM ₁₀	particulate matter with an aerodynamic diameter of 10 microns or less
PM _{2.5}	particulate matter with an aerodynamic diameter of 2.5 microns or less
ppb	parts per billion
ppm	parts per million
project	Santa Fe Flores Project
RAQS	Regional Air Quality Standards
ROG	reactive organic gases
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
TAC	toxic air contaminants
TCM	Transportation Control Measures
U.S. EPA	U.S. Environmental Protection Agency

Executive Summary

This report evaluates potential local and regional air quality impacts associated with the proposed Santa Fe Flores Project (project), located in the city of San Marcos at 2972 and 2982 South Santa Fe Avenue adjacent to Las Flores Drive. The project would require a General Plan Amendment and Rezone to multi-family residential to allow the development of 50 multi-family residential units.

The primary goal of the San Diego Air Pollution Control District's Regional Air Quality Strategy (RAQS) is to reduce ozone precursor emissions. The northern portion of the project site is designated Light Industrial in the City of San Marcos (City) General Plan and is zoned L-I Light Industrial. The southern portion of the project site is designated Commercial in the City's General Plan and is zoned C Commercial. The project would require a General Plan Amendment and Rezone to multi-family residential. However, project emissions would be less than operational emissions associated with an industrial and commercial project that is consistent with the existing land use and zoning designations. Therefore, the project would not result in an increase in emissions that are not already accounted for in the RAQS. Thus, it can be concluded that the project would not obstruct or conflict with the implementation of the RAQS.

Additionally, as calculated in this analysis, project construction emissions would not exceed the applicable screening level emissions thresholds. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. Therefore, as project emissions would be well below these limits, project construction would not result in a cumulatively considerable net increase in emissions of ozone (O_3), particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), or particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$), and impacts would be less than significant. Additionally, construction emissions would be temporary, intermittent, and would cease at the end of project construction.

Long-term emissions of regional air pollutants occur from operational sources. Based on emissions estimates, project operational emissions would not exceed the applicable regional emissions thresholds. Therefore, as project operational emissions would be below these limits, project operation would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10} , or $PM_{2.5}$, and impacts would be less than significant.

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. The nearest sensitive receptors are the residential uses located 300 feet to the northeast, 100 feet to the southeast, 160 feet to the south, and 115 feet to the southwest. The project is not anticipated to result in a carbon monoxide (CO) hot spot at project area intersections. Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site, heavy duty equipment. However, given the temporary nature of construction activities and implementation of Best Available Control Technology for Toxics measures, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations during construction.

The project does not include heavy industrial or agricultural uses that are typically associated with objectionable odors. The project would involve the use of diesel-powered equipment during

construction. Diesel exhaust may occasionally be noticeable at adjacent properties; however, construction activities would be temporary, and the odors would dissipate quickly in an outdoor environment. Therefore, this impact would be less than significant.

1.0 Introduction

The purpose of this report is to assess potential short-term and long-term local and regional air quality impacts resulting from development of the proposed Santa Fe Flores Project (project).

Air pollution affects all southern Californians. Effects can include increased respiratory infections, increased discomfort, missed days from work and school, and increased mortality. Polluted air also damages agriculture and our natural environment.

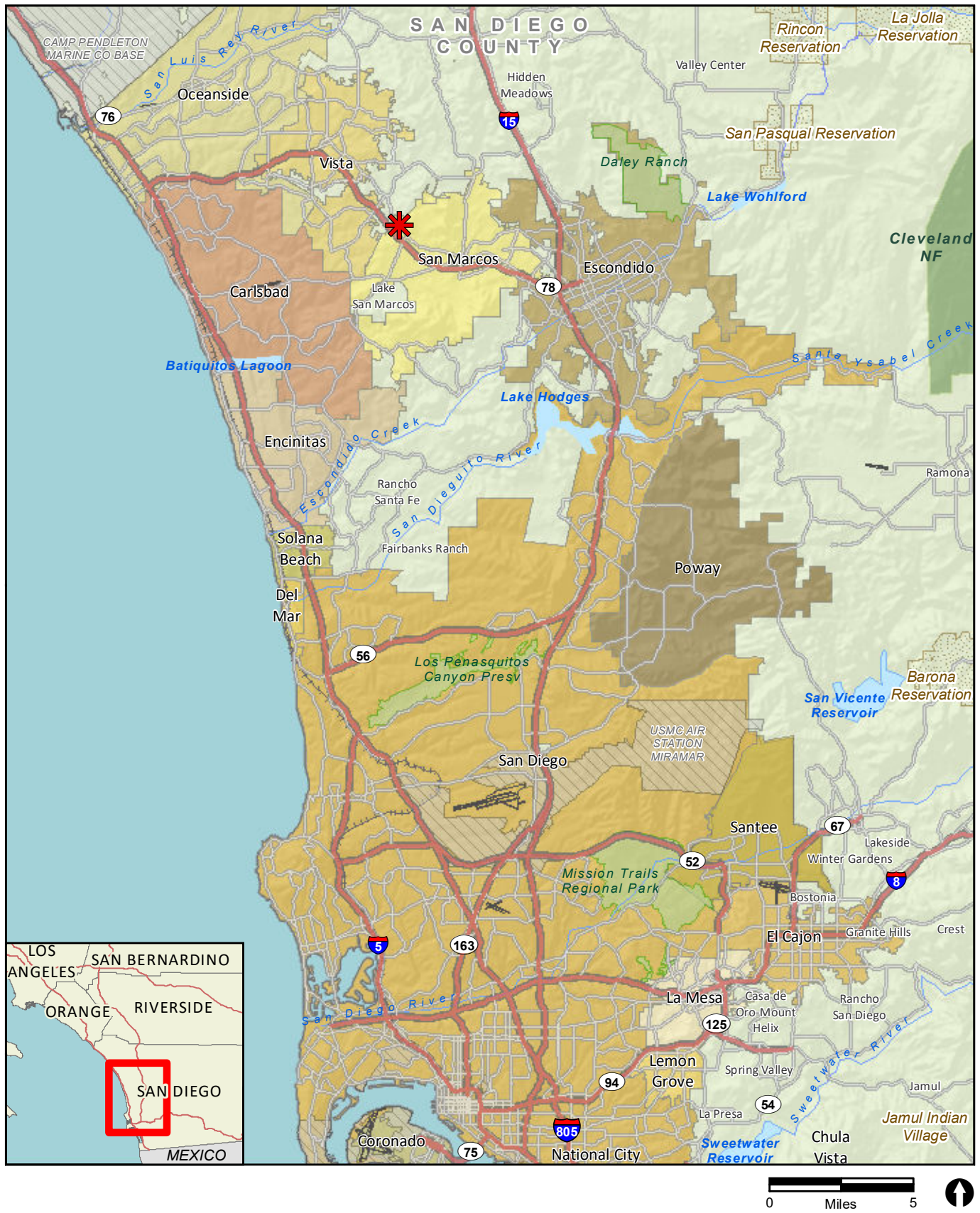
The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. The project site is located within the San Diego Air Basin (SDAB). The SDAB is currently classified as a federal non-attainment area for ozone, and a state non-attainment area for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM_{2.5}), and ozone.

Air quality impacts can result from the construction and operation of the project. Construction impacts are short term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts can occur on two levels: regional impacts resulting from growth-inducing development, or local hot-spot effects stemming from sensitive receivers being placed close to highly congested roadways. In the case of this project, operational impacts would be primarily due to emissions to the basin from mobile sources associated with vehicular travel along the roadways within the project area.

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

2.0 Project Description

The project is located in the city of San Marcos at 2972 and 2982 South Santa Fe Avenue adjacent to Las Flores Drive on assessor parcel numbers 217-161-1800 and 217-161-1900. Figure 1 shows the regional location. The 2.5-acre project site has been previously graded and is undeveloped, and is currently designated Commercial and Light Industrial in the City General Plan and zoned as Commercial and Light Industrial. Figure 2 shows an aerial photograph of the project site and vicinity.



 Project Location

FIGURE 1
Regional Location



 Project Boundary

FIGURE 2
Project Location on Aerial Photograph

The project would require a General Plan amendment and Rezone to Multifamily Residential to allow the development of 50 multi-family residential units in one building that would be three to four stories in height. The project would also include a 1,000 square-foot roof deck for fitness and leisure, a 1,170 square-foot ground floor leasing and amenity center, and 120 square-foot ground floor fire command center. Vehicle parking would include a total of 107 surface parking spaces and bicycle parking would include a total of 11 lockers or bike storage rooms located on the upper and lower levels. Figure 3 shows the proposed site plan.

3.0 Regulatory Framework

3.1 Federal Regulations

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

Six criteria pollutants of primary concern have been designated: ozone, carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), lead (Pb), and respirable particulate matter (PM₁₀ and PM_{2.5}). The primary NAAQS "... in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health ..." and the secondary standards "... protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" (42 USC 7409[b][2]). The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 1 (California Air Resources Board [CARB] 2016).

An air basin is designated as either attainment or non-attainment for a particular pollutant. Once a non-attainment area has achieved the AAQS for a particular pollutant, it is re-designated as an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for three consecutive years. After re-designation to attainment, the area is known as a maintenance area and must develop a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. The SDAB is a non-attainment area for the federal ozone standard.

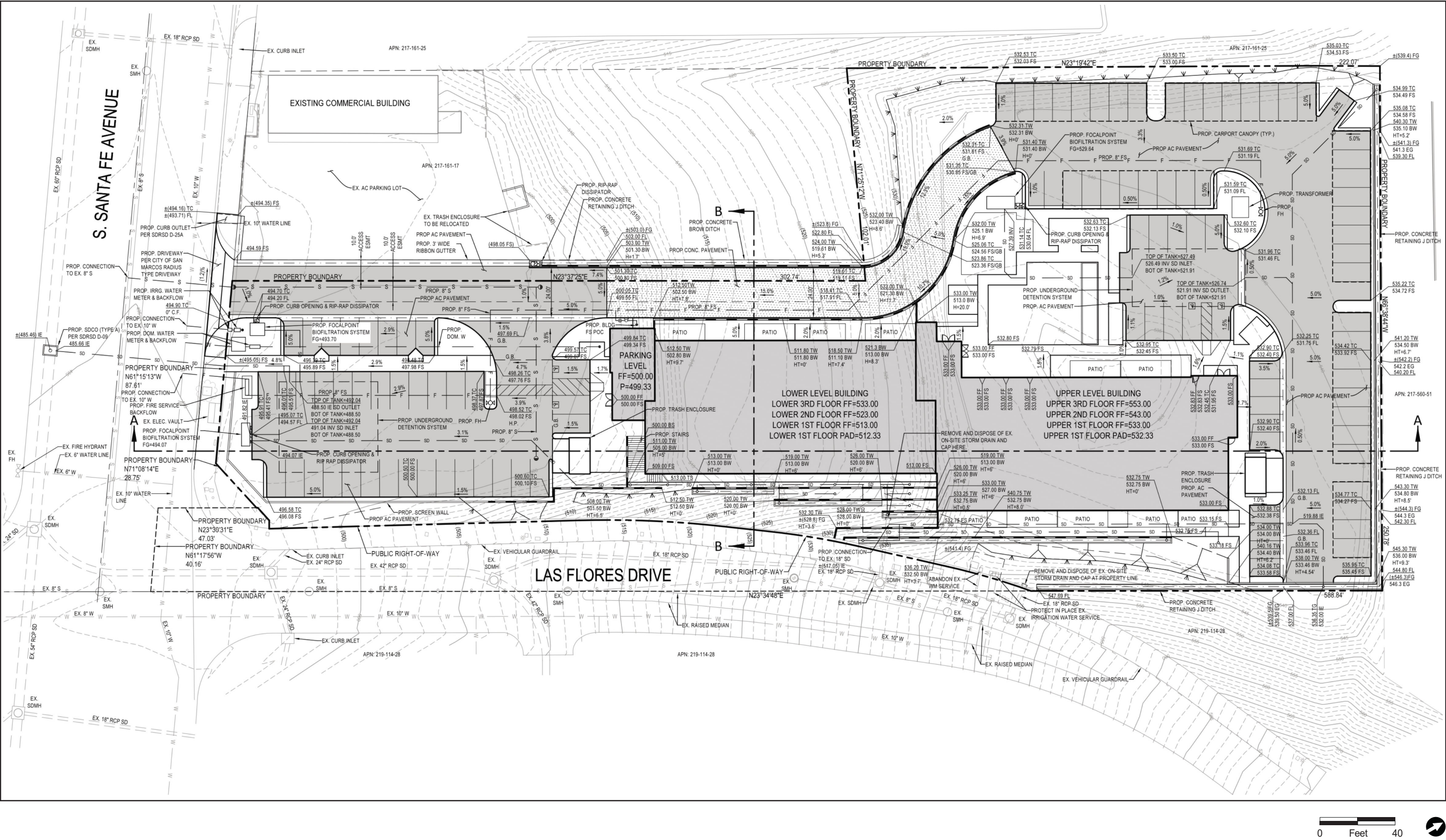


FIGURE 3
Site Plan

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

Table 1
Ambient Air Quality Standards

ppm = parts per million; ppb = parts per billion; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter; – = not applicable.

- ¹ California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10} , $\text{PM}_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10} , the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For $\text{PM}_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.
- ⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁷ Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- ⁸ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ⁹ On December 14, 2012, the national annual $\text{PM}_{2.5}$ primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour $\text{PM}_{2.5}$ standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standards of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM_{10} standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ¹⁰ To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of ppb. California standards are in units of ppm. To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ¹¹ On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- ¹² The Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ¹³ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- ¹⁴ In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016.

3.2 State Regulations

3.2.1 Criteria Pollutants

The CARB has developed the California Ambient Air Quality Standards (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 1).

Similar to the federal CAA, the state classifies as either "attainment" or "non-attainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The SDAB is a non-attainment area for the state ozone standards, the state PM₁₀ standard, and the state PM_{2.5} standard.

3.2.2 Toxic Air Contaminants

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

The California air toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air.

The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SDAPCD's Regulation XII. Of particular concern statewide are diesel-exhaust particulate matter emissions. Diesel-exhaust particulate matter was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have

been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

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

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

However, transit-oriented, infill, and compact development characterizes many communities located near heavily traveled roadways. This type of development pattern has many benefits, including reducing traffic. To address these issues, in April 2017, CARB published the *Technical Advisory: Strategies to Reduce Air Pollution Exposure Near High Volume Roadways* (Technical Advisory; CARB 2017). The Technical Advisory acknowledges the benefits of transit-oriented infill development, which often occurs adjacent to high-volume roadways, and identifies strategies to reduce exposure, including practices and technologies that reduce traffic emissions, increase dispersion of traffic pollution, and remove pollution from the air. Strategies that reduce traffic emissions include speed reduction mechanisms (e.g., reduced speed limits, speed bumps, roundabouts) and traffic signal management. Strategies that increase the dispersion of traffic emissions include land use designs that promote airflow and pollutant dispersion along street corridors, solid barriers (such as sound walls), and vegetation. Strategies that remove pollution from the air include indoor high efficiency filtration.

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

3.2.3 State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (air quality management plans, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB

for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

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

3.2.4 The California Environmental Quality Act

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

3.3 San Diego Air Pollution Control District

The SDAPCD is the agency that regulates air quality in the SDAB. The SDAPCD prepared the Regional Air Quality Strategy (RAQS) in response to the requirements set forth in the California CAA AB 2595 (SDAPCD 1992) and the federal CAA. Motor vehicles are San Diego County's leading source of air pollution (SDAPCD 2013). In addition to these sources, other mobile sources include construction equipment, trains, and airplanes. Reducing mobile source emissions requires the technological improvement of existing mobile sources and the examination of future mobile sources, such as those associated with new or modification projects (e.g., retrofitting older vehicles with cleaner emission technologies). In addition to mobile sources, stationary sources also contribute to air pollution in the SDAB. Stationary sources include gasoline stations, power plants, dry cleaners, and other commercial and industrial uses. Stationary sources of air pollution are regulated by the local air pollution control or management district, in this case the SDAPCD.

The SDAPCD is responsible for preparing and implementing the RAQS. As part of the RAQS, the SDAPCD developed Transportation Control Measures (TCMs) for the air quality plan prepared by the San Diego Association of Governments (SANDAG) in accordance with AB 2595 and adopted by SANDAG on March 27, 1992, as Resolution Number 92-49 and Addendum. The RAQS and TCM set forth the steps needed to accomplish attainment of NAAQS and CAAQS. The required triennial updates of the RAQS and corresponding TCM were adopted in 1995, 1998, 2001, 2004, 2009, and 2016.

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

4.0 Environmental Setting

4.1 Geographic Setting

The project is located in the city of San Marcos, about eight miles east of the Pacific Ocean. The eastern portion of the SDAB is surrounded by mountains to the north, east, and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas below.

4.2 Climate

The project area, like the rest of San Diego County, has a Mediterranean climate characterized by warm, dry summers and mild winters. The mean annual temperature for the project area is 63 degrees Fahrenheit (°F). The average annual precipitation is 10 inches, falling primarily from November to April. Winter low temperatures in the project area average about 47°F, and summer high temperatures average about 75°F (National Oceanic and Atmospheric Administration 2021).

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

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the SDAB. Beneath the inversion layer pollutants become “trapped” as their ability to disperse diminishes. The mixing depth is the area under the inversion layer. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths, the greater the ability of the atmosphere to disperse pollutants.

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

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

Strong Santa Anas tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions, or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and

send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported and locally produced contaminants produce the worst air quality measurements recorded in the basin.

4.3 Existing Air Quality

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

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the CARB or federal standards set by the U.S. EPA. The SDAPCD currently maintains nine air quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The Camp Pendleton monitoring station, located at 21441 West B Street, approximately 12 miles northwest of the project site, is the nearest station to the project site. The Camp Pendleton monitoring station measures ozone (O₃) and nitrogen dioxide (NO₂). The closest station of the project site that measures PM₁₀ and PM_{2.5} is the San Diego–Kearny Villa Road monitoring station located at 6125A Kearny Villa Road, approximately 22 miles south of the project site. The San Diego–Kearny Villa Road monitoring station measures ozone, NO₂, PM₁₀, and PM_{2.5}. Table 2 provides a summary of measurements collected at the Camp Pendleton and Kearny Villa Road monitoring station for the years 2016 through 2020.

Table 2 Summary of Air Quality Measurements Recorded at the Camp Pendleton and Kearny Villa Road Monitoring Stations					
Pollutant/Standard	2016	2017	2018	2019	2020
CAMP PENDLETON MONITORING STATION					
Ozone					
Federal Max 8-hr (ppm)	0.073	0.081	0.068	0.064	0.074
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	4	4	0	0	3
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	0	1	0	0	0
State Max 8-hr (ppm)	0.073	0.082	0.069	0.065	0.074
Days State 8-hour Standard Exceeded (0.07 ppm)	5	5	0	0	3
Max. 1-hour (ppm)	0.083	0.094	0.084	0.075	0.094
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	0	0	0
Nitrogen Dioxide					
Max 1-hour (ppm)	0.072	0.063	0.048	0.053	0.058
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppb)	0	0	0	0	0
Annual Average (ppm)	0.006	0.006	--	0.005	0.006

Table 2 Summary of Air Quality Measurements Recorded at the Camp Pendleton and Kearny Villa Road Monitoring Stations					
Pollutant/Standard	2016	2017	2018	2019	2020
SAN DIEGO – KEARNY VILLA ROAD MONITORING STATION					
Ozone					
Federal Max 8-hr (ppm)	0.075	0.083	0.077	0.075	0.102
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	3	6	5	1	10
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	0	4	1	0	6
State Max 8-hr (ppm)	0.075	0.084	0.077	0.075	0.102
Days State 8-hour Standard Exceeded (0.07 ppm)	3	6	5	1	12
Max. 1-hour (ppm)	0.087	0.097	0.102	0.083	0.123
Days State 1-hour Standard Exceeded (0.09 ppm)	0	2	1	0	2
Nitrogen Dioxide					
Max 1-hour (ppm)	0.053	0.054	0.045	0.046	0.052
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppb)	0	0	0	0	0
Annual Average (ppm)	0.009	0.009	0.008	0.008	0.007
PM ₁₀ *					
Federal Max. Daily (µg/m ³)	36.0	46.0	38.0	--	--
Measured Days Federal 24-hour Standard Exceeded (150 µg/m ³)	0	0	0	--	--
Calculated Days Federal 24-hour Standard Exceeded (150 µg/m ³)	0.0	0.0	0.0	--	--
Federal Annual Average (µg/m ³)	17.1	17.6	18.4	--	--
State Max. Daily (µg/m ³)	35.0	47.0	38.0	--	--
Measured Days State 24-hour Standard Exceeded (50 µg/m ³)	0	0	0	--	--
Calculated Days State 24-hour Standard Exceeded (50 µg/m ³)	--	0.0	0.0	--	--
State Annual Average (µg/m ³)	--	17.6	18.4	--	--
PM _{2.5} *					
Federal Max. Daily (µg/m ³)	19.4	27.5	32.2	16.2	47.5
Measured Days Federal 24-hour Standard Exceeded (35 µg/m ³)	0	0	0	0	2
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m ³)	0.0	0.0	0.0	0.0	5.8
Federal Annual Average (µg/m ³)	7.5	7.9	8.3	7.0	8.7
State Max. Daily (µg/m ³)	20.3	27.5	32.2	15.0	--
State Annual Average (µg/m ³)	7.8	8.0	8.3	--	--
SOURCE: CARB 2022. ppm = parts per million; µg/m ³ = micrograms per cubic meter; -- = Not available. * Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.					

4.3.1 Ozone

Nitrogen oxides (NO_x) and hydrocarbons (reactive organic gases [ROG]) are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone, which is the primary air pollution problem in the SDAB. Because sunlight plays such an important role in its formation, ozone pollution—or smog—is mainly a concern during the daytime in summer months. The SDAB is currently designated a federal and state non-attainment area for ozone. During the past 25 years, San Diego had experienced a decline in the number of days with unhealthy levels of ozone despite the region’s growth in population and vehicle miles traveled (SDAPCD 2013).

About half of smog-forming emissions come from automobiles. Population growth in San Diego has resulted in a large increase in the number of automobiles expelling ozone-forming pollutants while operating on area roadways. In addition, the occasional transport of smog-filled air from the South Coast Air Basin only adds to the SDAB's ozone problem. Stricter automobile emission controls, including more efficient automobile engines, have played a large role in why ozone levels have steadily decreased.

In order to address adverse health effects due to prolonged exposure, the U.S. EPA phased out the national 1-hour ozone standard and replaced it with the more protective 8-hour ozone standard. The SDAB is currently a non-attainment area for the previous (1997) national 8-hour standard and is recommended as a non-attainment area for the revised (2008) national 8-hour standard of 0.075 parts per million (ppm).

Not all the ozone within the SDAB is derived from local sources. Under certain meteorological conditions, such as during Santa Ana wind events, ozone and other pollutants are transported from the Los Angeles Basin and combine with ozone formed from local emission sources to produce elevated ozone levels in the SDAB.

Local agencies can control neither the source nor the transportation of pollutants from outside the air basin. The SDAPCD's policy, therefore, has been to control local sources effectively enough to reduce locally produced contamination to clean air standards. Through the use of air pollution control measures outlined in the RAQS, the SDAPCD has effectively reduced ozone levels in the SDAB.

Actions that have been taken in the SDAB to reduce ozone concentrations include the following:

- **TCMs if vehicle travel and emissions exceed attainment demonstration levels.** TCMs are strategies that will reduce transportation-related emissions by reducing vehicle use or improving traffic flow.
- **Enhanced motor vehicle inspection and maintenance program.** The smog check program is overseen by the Bureau of Automotive Repair. The program requires most vehicles to pass a smog test once every two years before registering in the state of California. The smog check program monitors the amount of pollutants automobiles produce. One focus of the program is identifying "gross polluters," or vehicles that exceed two times the allowable emissions for a particular model. Regular maintenance and tune-ups, changing the oil, and checking tire inflation can improve gas mileage and lower air pollutant emissions. It can also reduce traffic congestion due to preventable breakdowns, further lowering emissions.
- **Air Quality Improvement Program.** This program, established by AB 118, is a voluntary incentive program administered by the CARB to fund clean vehicle and equipment projects, research on biofuels production and the air quality impacts of alternative fuels, and workforce training.

4.3.2 Carbon Monoxide

The SDAB is classified as a state attainment area and as a federal maintenance area for CO. Until 2003, no violations of the state standard for CO had been recorded in the SDAB since 1991, and no violations of the national standard had been recorded in the SDAB since 1989. The violations that took place in 2003 were likely the result of massive wildfires that occurred throughout the county. No violations of the state or federal CO standards have occurred since 2003.

Small-scale, localized concentrations of CO above the state and national standards have the potential to occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as “CO hot spots” and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

4.3.3 Particulate Matter

Particulate matter is a complex mixture of microscopic solid or liquid particles including chemicals, soot, and dust. Anthropogenic sources of direct particulate emissions include crushing or grinding operations, dust stirred up by vehicle traffic, and combustion sources such as motor vehicles, power plants, wood burning, forest fires, agricultural burning and industrial processes. Additionally, indirect emissions may be formed when aerosols react with compounds found in the atmosphere.

Health studies have shown a significant association between exposure to particulate matter and premature death in people with heart or lung diseases. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and irregular heartbeat (U.S. EPA 2021).

As its properties vary based on the size of suspended particles, particulate matter is generally categorized as PM₁₀ or PM_{2.5}.

4.3.3.1 PM₁₀

PM₁₀, occasionally referred to as “inhalable coarse particles,” has an aerodynamic diameter of about one-seventh of the diameter of a human hair. High concentrations of PM₁₀ are often found near roadways, construction, mining, or agricultural operations.

4.3.3.2 PM_{2.5}

PM_{2.5}, occasionally referred to as “inhalable fine particles,” has an aerodynamic diameter of about one-thirtieth of the diameter of a human hair. PM_{2.5} is the main cause of haze in many parts of the United States. Federal standards applicable to PM_{2.5} were first adopted in 1997.

4.3.4 Other Criteria Pollutants

The national and state standards for NO₂, oxides of sulfur (SO_x), and the previous standard for lead are being met in the SDAB, and the latest pollutant trends suggest that these standards will not be

exceeded in the foreseeable future. As discussed above, new standards for these pollutants have been adopted, and new designations for the SDAB will be determined in the future. The SDAB is also in attainment of the state standards for vinyl chloride, hydrogen sulfides, sulfates, and visibility-reducing particulates.

5.0 Thresholds of Significance

Thresholds used to evaluate potential impacts to air quality are based on applicable criteria in the CEQA Guidelines Appendix G. The project would have a significant air quality impact if it would:

1. Obstruct or conflict with the implementation of the RAQS.
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions such as those leading to odors adversely affecting a substantial number of people.

The City has not adopted air quality significance thresholds. The SDAPCD also does not provide specific numeric thresholds for determining the significance of air quality impacts under CEQA. However, the SDAPCD does specify Air Quality Impact Analysis trigger levels for new or modified stationary sources (SDAPCD Rules 20.1, 20.2, and 20.3). The SDAPCD does not consider these trigger levels to represent adverse air quality impacts, rather, if these trigger levels are exceeded by a project, the SDAPCD requires an air quality analysis to determine if a significant air quality impact would occur. While, these trigger levels do not generally apply to mobile sources or general land development projects, for comparative purposes these levels are used to evaluate the increased emissions that would be discharged to the SDAB if the project were approved. The air quality impact screening levels used in this analysis are shown in Table 3.

Table 3 Air Quality Impact Screening Levels			
Pollutant	Emission Rate		
	Pounds/Hour	Pounds/Day	Tons/Year
NO _x	25	250	40
SO _x	25	250	40
CO	100	550	100
PM ₁₀	--	100	15
Lead	--	3.2	0.6
VOC, ROG ¹	--	250	--
PM _{2.5}	--	67	10
SOURCE: SDAPCD, Rules 20.1, 20.2, 20.3.			
¹ ROG threshold based on federal General Conformity <i>de minimus</i> levels for ozone precursors.			

6.0 Air Quality Assessment

Construction impacts are short term and result from fugitive dust, equipment exhaust, and indirect effects associated with construction workers and deliveries. Operational impacts can occur on two levels: regional or local. In the case of this project, operational impacts are primarily due to emissions from mobile sources associated with vehicular travel along the roadways within the project area.

Construction and operation air emissions were calculated using California Emissions Estimator Model (CalEEMod) 2020.4.0 (California Air Pollution Control Officers Association [CAPCOA] 2021). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. The model estimates mass emissions from two basics sources: construction sources and operational sources (i.e., area, energy, and mobile sources).

Inputs to CalEEMod include such items as the air basin containing the project, land uses, trip generation rates, trip lengths, vehicle fleet mix (i.e., percentage of autos, medium truck, etc.), trip destination (i.e., percent of trips from home to work, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters. The CalEEMod output files contained in Attachment 1 indicate the specific outputs for each model run. Emissions of NO_x, CO, SO_x, PM₁₀, PM_{2.5}, and ROG are calculated. Emission factors are not available for lead, and consequently, lead emissions are not calculated. The SDAB is currently in attainment of the federal and state lead standards. Furthermore, fuel used in construction equipment and most other vehicles is not leaded.

6.1 Construction Emissions

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

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

Construction-related pollutants result from dust raised during demolition and grading, emissions from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in Regulation 4, Rules 52, 54, and 55, of the SDAPCD's rules and regulations.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_x, SO_x, and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than do gasoline-powered engines. Standard construction equipment includes tractors/loaders/backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

Primary inputs are the numbers of each piece of equipment and the length of each construction stage. Specific construction phasing and equipment parameters are not available at this time. However, CalEEMod can estimate the required construction equipment when project-specific information is unavailable. The estimates are based on surveys, performed by the South Coast Air Quality Management District and the Sacramento Metropolitan Air Quality Management District, of typical construction projects which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters. Construction emissions were modeled assuming construction would begin in January 2023 and last for approximately one year, which is the CalEEMod default construction duration for the entered land uses. Assuming construction would begin in January 2023 is conservative, as continued implementation of regulations for off-road equipment, the primary construction emission source, would reduce emissions from these sources over time. Project grading would include the export of 17,250 cubic yards of soil.

Table 4 shows the total projected construction maximum daily emission levels for each criteria pollutant. The CalEEMod output files for construction emissions are contained in Attachment 1.

Table 4 Summary of Maximum Construction Emissions (pounds per day)						
Construction	Pollutant					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Site Preparation	1	14	10	<1	2	1
Grading	2	63	22	<1	15	6
Building Construction	2	15	16	<1	1	1
Paving	1	9	12	<1	1	<1
Architectural Coatings	73	1	2	<1	<1	<1
Maximum Daily Emissions	73	63	22	<1	15	6
<i>Significance Threshold</i>	<i>250</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>

Standard dust control measures would be implemented as a part of project construction in accordance with SDAPCD rules and regulations. Fugitive dust emissions were calculated using CalEEMod default values and did not take into account the required dust control measures. Thus, the emissions shown in Table 4 are conservative.

For assessing the significance of the air quality emissions resulting during construction of the project, the construction emissions were compared to the screening thresholds shown in Table 4. As shown in Table 4, maximum daily construction emissions associated with the project are projected to be less than the applicable thresholds for all criteria pollutants. Construction related air quality impacts would be less than significant.

6.2 Operation Emissions

Mobile source emissions would originate from traffic generated by the project. Area source emissions would result from the use of natural gas, consumer products, as well as applying architectural coatings and landscaping activities.

Mobile source operational emissions are based on the trip rate, trip length. The project would generate 6 trips per unit for a total of 300 average daily trips (Linscott, Law and Greenspan, Engineers 2022). Default trip distances and default vehicle emission factors for the soonest operational year of 2024 were used.

Area source emissions associated with the project include consumer products, natural gas used in space and water heating, architectural coatings, and landscaping equipment. Hearths (fireplaces) and woodstoves are also a source of area emissions; however, the project would not include hearths or woodstoves. Consumer products are chemically formulated products used by household and institutional consumers, including, but not limited to, detergents, cleaning compounds, polishes, floor finishes, disinfectants, sanitizers, and aerosol paints but not including other paint products, furniture coatings, or architectural coatings. Emissions due to consumer products are calculated using total building area and product emission factors.

For architectural coatings, emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. Emissions are based on the building surface area, architectural coating emission factors, and a reapplication rate of 10 percent of area per year. Landscaping maintenance includes fuel combustion emission from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers as well as air compressors, generators, and pumps. Emission calculations take into account building area, equipment emission factors, and the number of operational days (summer days).

Energy source emissions associated with the project include natural gas used in space and water heating. Emissions are generated from the combustion of natural gas used in space and water heating. Emissions are based on the Residential Appliance Saturation Survey which is a comprehensive energy use assessment that includes the end use for various climate zones in California.

Table 5 provides a summary of the operational emissions generated by the project. CalEEMod output files for project operation are contained in Attachment 1. As shown, project-generated emissions are projected to be less than the screening level thresholds for all criteria pollutants.

Table 5 Summary of Project Operational Emissions (pounds per day)						
Source	Pollutant					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	1	<1	4	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	1	1	8	<1	2	<1
Total	2	1	12	<1	2	1
<i>Significance Threshold</i>	<i>250</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
NOTE: Totals may vary due to independent rounding.						

6.3 Impact Analysis

1. Would the project obstruct or conflict with the implementation of the San Diego RAQS?

The RAQS is the applicable regional air quality plan that sets forth the SDAPCD's strategies for achieving the NAAQS and CAAQS. The SDAB is designated non-attainment for the federal and state ozone standard. Accordingly, the RAQS was developed to identify feasible emission control measures and provide expeditious progress toward attaining the standards for ozone. The two pollutants addressed in the RAQS are ROG and NO_x, which are precursors to the formation of ozone. Projected increases in motor vehicle usage, population, and growth create challenges in controlling emissions and by extension to maintaining and improving air quality. The RAQS, in conjunction with the TCM, were most recently adopted in 2016 as the air quality plan for the region.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the general plan would not conflict with the RAQS. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The northern 1.5-acre portion of the project site is designated Light Industrial in the City's General Plan and is zoned Light Industrial (L-I). The southern 0.8-acre portion of the project site is designated Commercial in the City's General Plan and is zoned Commercial (C). The project would require a General Plan Amendment and Rezone to Multi-Family Residential (R-3-10). The project would not be consistent with the existing land use and zoning designations for the project site; however, this does not imply that the project would be inconsistent with the growth projections assumed in the RAQS.

In order to determine if emissions associated with the project are accounted for in the growth projections assumed in the RAQS, emissions due to operation of a project consistent with the existing land use and zoning designations were calculated and compared to emissions associated with operation of the project. Title 20 – Zoning of the City’s Municipal Code establishes allowable floor area ratios (FAR) for each zone. Light Industrial zones have a FAR of 0.6 and Commercial zones have a FAR of 0.7. Under these requirements, should the site be developed with commercial and industrial land uses as allowed under the existing land use and zoning designations, approximately 38,000 square feet of light industrial development and 24,000 square feet of commercial development could be constructed. Table 6 summarizes the emissions associated with an industrial and commercial land use along with the emissions associated with the project. The CalEEMod output files for the project are contained in Attachment 1, and the CalEEMod output files for the industrial and commercial project are contained in Attachment 2.

Table 6 Commercial and Industrial Land Use Operational Emissions (pounds per day)						
Source	Pollutant					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
PROJECT EMISSIONS						
Area Sources	1	<1	4	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	1	1	8	<1	2	<1
Total	2	1	12	<1	2	1
INDUSTRIAL AND COMMERCIAL PROJECT EMISSIONS						
Area Sources	2	<1	<1	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Mobile Sources	3	3	25	<1	5	1
Total	4	3	25	<1	5	1
NOTE: Totals may vary due to independent rounding.						

As shown, project emissions would be less than operational emissions associated with an industrial and commercial project that is consistent with the existing land use and zoning designations. Therefore, the project would not result in an increase in emissions that are not already accounted for in the RAQS.

Additionally, shown in Tables 4 and 5, project emissions would not exceed the screening level thresholds. Therefore, the project would not result in an increase in emissions that are not already accounted for in the RAQS. The project would not obstruct or conflict with implementation of the RAQS, and impacts would be less than significant.

2. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The region is classified as an attainment area for all criterion pollutants except ozone, PM₁₀, and PM_{2.5}. The SDAB is a non-attainment area for the 8-hour federal and state ozone standards. Ozone

is not emitted directly, but is a result of atmospheric activity on precursors. NO_x and ROG are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone. PM_{2.5} includes fine particles that are found in smoke and haze, and are emitted from all types of combustion activities (motor vehicles, power plants, wood burning, etc.) and certain industrial processes. PM₁₀ includes both fine and coarse dust particles, and sources include crushing or grinding operations and dust from paved or unpaved roads.

As shown in Table 4, project construction would not exceed the applicable regional emissions thresholds. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. Therefore, as project construction emissions would be below these limits, project construction would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

Long-term emissions of regional air pollutants occur from operational sources. As shown in Table 5, project operation would not exceed the applicable regional emissions thresholds. Therefore, as operational emissions would be below these limits, the project would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

3. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. The nearest sensitive receptors are the residential uses located 300 feet to the northeast, 100 feet to the southeast, 160 feet to the south, and 115 feet to the southwest.

Carbon Monoxide Hot Spots

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. The SDAB is a CO maintenance area under the federal CAA. This means that SDAB was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards.

Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. This analysis conservatively assesses potential CO hot spots using the South Coast Air Quality Management District screening threshold of 31,600 vehicles per hour.

As discussed, the project would generate 300 daily trips. Based on the project daily traffic volumes on roadways in the vicinity of the project site (SANDAG 2022), the hourly turning volumes at nearby intersections are projected to be well less than 31,600 vehicles per hour. Therefore, the project is not anticipated to result in a CO hot spot.

Diesel Particulate Matter – Construction

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

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction is anticipated to last for approximately 14 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were one year, the exposure would be 3 percent of the total 30-year exposure period used for health risk calculation. Further, the project would implement construction best management practices and would be conducted in accordance with CARB regulations. Specifically, the project would implement the following Best Available Control Technology for Toxics measures during construction:

- The construction fleet shall use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or utilize CARB/U.S. EPA Engine Certification Tier 3 or better, or other equivalent methods approved by the CARB.
- The engine size of construction equipment shall be the minimum size suitable for the required job.
- Construction equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications.
- Per CARB's Airborne Toxic Control Measures 13 (California Code of Regulations Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons.

Therefore, DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of noncarcinogenic TACs that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be substantially reduced. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentration.

Stationary Sources

CARB provides guidance on siting land uses near major emitters or facilities of concern. These facilities include distribution centers, chrome platers, dry cleaners using perchloroethylene, and large gas stations. CARB siting constraints are summarized in Table 7.

The project would not include any of the sources included in Table 7. The project would not construct a stationary source of toxic emissions.

Table 7 CARB Land Use Siting Constraints	
Source Category	Recommended Buffer Distances (feet)
Distribution centers (that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week)	1,000
Chrome platers	1,000
Dry cleaners using perchloroethylene (1 machine)	300
Dry cleaners using perchloroethylene (2 machines)	500
Dry cleaners using perchloroethylene (3 or more machines)	Requires consultation with APCD
Large gas station (3.6 million gallons or more per year)	300
Other gas stations	50
SOURCE: CARB 2005.	

4. *Would the project result in other emissions such as those leading to odors adversely affecting a substantial number of people?*

The project does not include heavy industrial or agricultural uses that are typically associated with odor complaints. During construction, diesel equipment may generate some nuisance odors. However, exposure to odors associated with project construction would be short term and temporary in nature. Impacts associated with odors would be less than significant.

7.0 Conclusions

The primary goal of the RAQS is to reduce ozone precursor emissions. The northern portion of the project site is designated Light Industrial in the City's General Plan and is zoned L-I Light Industrial. The southern portion of the project site is designated Commercial in the City's General Plan and is zoned C Commercial. The project would require a General Plan Amendment and Rezone to multi-family residential. However, project emissions would be less than operational emissions associated with an industrial and commercial project that is consistent with the existing land use and zoning designations. Therefore, the project would not result in an increase in emissions that are not already accounted for in the RAQS. Thus, it can be concluded that the project would not obstruct or conflict with the implementation of the RAQS.

As shown in Table 4, project construction emissions would not exceed the applicable regional emissions thresholds. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. Therefore, as project construction emissions would be below these limits, project construction would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant. Additionally, construction emissions would be temporary, intermittent, and would cease at the end of project construction.

Long-term emissions of regional air pollutants occur from operational sources. As shown in Table 5, project operational emissions would not exceed the applicable regional emissions thresholds. Therefore, as project operational emissions would be below these limits, project operation would not result in a cumulatively considerable net increase in emissions of ozone, PM₁₀, or PM_{2.5}, and impacts would be less than significant.

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. The nearest sensitive receptors are the residential uses located 300 feet to the northeast, 100 feet to the southeast, 160 feet to the south, and 115 feet to the southwest. The project is not anticipated to result in a CO hot spot at project area intersections. Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. However, given the temporary nature of construction activities and implementation of Best Available Control Technology for Toxics measures, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations during construction.

The project does not include heavy industrial or agricultural uses that are typically associated with objectionable odors. The project would involve the use of diesel-powered construction equipment. Diesel exhaust may be noticeable temporarily at adjacent properties; however, construction activities would be temporary. Therefore, odor impacts would be less than significant.

8.0 References Cited

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ATTACHMENTS

ATTACHMENT 1

CalEEMod Output – Project Emissions

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9865 Santa Fe Flores San Marcos
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	77.10	1000sqft	1.77	77,101.00	0
Apartment Mid Rise	50.00	Dwelling Unit	0.43	50,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 50 units
0.43 acre building footprint
2.2 acres
Construction Phase -
Grading - 17,250 cy export
Architectural Coating - SDAPCD Rule 67.0.1
Vehicle Trips - 6 trips/du weekday trip rates
Woodstoves - No woodstoves or fireplaces
Area Coating - SDAPCD Rule 67.0.1
Trips and VMT -

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	27.50	0.00
tblFireplaces	NumberNoFireplace	5.00	50.00
tblFireplaces	NumberWood	17.50	0.00
tblGrading	MaterialExported	0.00	17,250.00
tblLandUse	LandUseSquareFeet	77,100.00	77,101.00
tblLandUse	LotAcreage	1.32	0.43
tblVehicleTrips	ST_TR	4.91	5.42
tblVehicleTrips	SU_TR	4.09	4.51
tblVehicleTrips	WD_TR	5.44	6.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	72.7714	63.3885	22.0060	0.2365	13.8536	1.0045	14.8581	5.2304	0.9388	6.1692	0.0000	25,850.8061	25,850.8061	1.8422	3.7846	27,024.6586
Maximum	72.7714	63.3885	22.0060	0.2365	13.8536	1.0045	14.8581	5.2304	0.9388	6.1692	0.0000	25,850.8061	25,850.8061	1.8422	3.7846	27,024.6586

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	72.7714	63.3885	22.0060	0.2365	13.8536	1.0045	14.8581	5.2304	0.9388	6.1692	0.0000	25,850.8061	25,850.8061	1.8422	3.7846	27,024.6586
Maximum	72.7714	63.3885	22.0060	0.2365	13.8536	1.0045	14.8581	5.2304	0.9388	6.1692	0.0000	25,850.8061	25,850.8061	1.8422	3.7846	27,024.6586

[illegible]

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Energy	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Mobile	0.8456	0.9520	7.9716	0.0164	1.8032	0.0129	1.8161	0.4804	0.0121	0.4924		1,698.6339	1,698.6339	0.1225	0.0773	1,724.7343
Total	2.2771	1.0914	12.1419	0.0172	1.8032	0.0432	1.8465	0.4804	0.0424	0.5227	0.0000	1,823.3395	1,823.3395	0.1319	0.0795	1,850.3159

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Energy	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Mobile	0.8456	0.9520	7.9716	0.0164	1.8032	0.0129	1.8161	0.4804	0.0121	0.4924		1,698.6339	1,698.6339	0.1225	0.0773	1,724.7343
Total	2.2771	1.0914	12.1419	0.0172	1.8032	0.0432	1.8465	0.4804	0.0424	0.5227	0.0000	1,823.3395	1,823.3395	0.1319	0.0795	1,850.3159

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 1.77****Residential Indoor: 101,250; Residential Outdoor: 33,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,626 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,156.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755
Total	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755
Total	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.4866	0.0000	7.4866	3.4859	0.0000	3.4859			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.4866	0.6044	8.0909	3.4859	0.5560	4.0419		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7650	48.9018	13.0735	0.2152	6.2848	0.3997	6.6845	1.7227	0.3824	2.1051		23,784.98 93	23,784.98 93	1.1947	3.7826	24,942.06 39
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444
Total	0.7947	48.9209	13.3022	0.2159	6.3670	0.4002	6.7671	1.7445	0.3828	2.1273		23,855.19 14	23,855.19 14	1.1968	3.7846	25,012.90 83

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.4866	0.0000	7.4866	3.4859	0.0000	3.4859			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.4866	0.6044	8.0909	3.4859	0.5560	4.0419	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7650	48.9018	13.0735	0.2152	6.2848	0.3997	6.6845	1.7227	0.3824	2.1051		23,784.98 93	23,784.98 93	1.1947	3.7826	24,942.06 39
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444
Total	0.7947	48.9209	13.3022	0.2159	6.3670	0.4002	6.7671	1.7445	0.3828	2.1273		23,855.19 14	23,855.19 14	1.1968	3.7846	25,012.90 83

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0209	0.8041	0.2865	3.6900e-003	0.1219	4.7200e-003	0.1266	0.0351	4.5200e-003	0.0396		398.4502	398.4502	0.0120	0.0578	415.9583
Worker	0.2016	0.1299	1.5549	4.6600e-003	0.5586	3.0000e-003	0.5616	0.1482	2.7700e-003	0.1509		477.3738	477.3738	0.0144	0.0135	481.7421
Total	0.2225	0.9340	1.8414	8.3500e-003	0.6805	7.7200e-003	0.6882	0.1833	7.2900e-003	0.1905		875.8240	875.8240	0.0264	0.0712	897.7004

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0209	0.8041	0.2865	3.6900e-003	0.1219	4.7200e-003	0.1266	0.0351	4.5200e-003	0.0396		398.4502	398.4502	0.0120	0.0578	415.9583
Worker	0.2016	0.1299	1.5549	4.6600e-003	0.5586	3.0000e-003	0.5616	0.1482	2.7700e-003	0.1509		477.3738	477.3738	0.0144	0.0135	481.7421
Total	0.2225	0.9340	1.8414	8.3500e-003	0.6805	7.7200e-003	0.6882	0.1833	7.2900e-003	0.1905		875.8240	875.8240	0.0264	0.0712	897.7004

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.4637					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3439	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666
Total	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4
Paving	0.4637					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3439	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666
Total	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5382					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	72.7299	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0415	0.0267	0.3201	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		98.2829	98.2829	2.9700e-003	2.7700e-003	99.1822
Total	0.0415	0.0267	0.3201	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		98.2829	98.2829	2.9700e-003	2.7700e-003	99.1822

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5382					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	72.7299	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0415	0.0267	0.3201	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		98.2829	98.2829	2.9700e-003	2.7700e-003	99.1822
Total	0.0415	0.0267	0.3201	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		98.2829	98.2829	2.9700e-003	2.7700e-003	99.1822

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8456	0.9520	7.9716	0.0164	1.8032	0.0129	1.8161	0.4804	0.0121	0.4924		1,698.633 9	1,698.633 9	0.1225	0.0773	1,724.734 3
Unmitigated	0.8456	0.9520	7.9716	0.0164	1.8032	0.0129	1.8161	0.4804	0.0121	0.4924		1,698.633 9	1,698.633 9	0.1225	0.0773	1,724.734 3

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	300.00	271.00	225.50	814,373	814,373
Parking Lot	0.00	0.00	0.00		
Total	300.00	271.00	225.50	814,373	814,373

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
NaturalGas Unmitigated	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	996.719	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0.996719	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

6.0 Area Detail

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Unmitigated	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1247	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4445	7.4445	7.1700e-003		7.6238
Total	1.4207	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1247	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4445	7.4445	7.1700e-003		7.6238
Total	1.4207	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

7.0 Water Detail**7.1 Mitigation Measures Water**

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9865 Santa Fe Flores San Marcos
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	77.10	1000sqft	1.77	77,101.00	0
Apartment Mid Rise	50.00	Dwelling Unit	0.43	50,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 50 units
0.43 acre building footprint
2.2 acres
Construction Phase -
Grading - 17,250 cy export
Architectural Coating - SDAPCD Rule 67.0.1
Vehicle Trips - 6 trips/du weekday trip rates
Woodstoves - No woodstoves or fireplaces
Area Coating - SDAPCD Rule 67.0.1
Trips and VMT -

9865 Santa Fe Flores San Marcos - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	27.50	0.00
tblFireplaces	NumberNoFireplace	5.00	50.00
tblFireplaces	NumberWood	17.50	0.00
tblGrading	MaterialExported	0.00	17,250.00
tblLandUse	LandUseSquareFeet	77,100.00	77,101.00
tblLandUse	LotAcreage	1.32	0.43
tblVehicleTrips	ST_TR	4.91	5.42
tblVehicleTrips	SU_TR	4.09	4.51
tblVehicleTrips	WD_TR	5.44	6.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	72.7682	61.4905	21.8570	0.2363	13.8536	1.0037	14.8573	5.2304	0.9381	6.1685	0.0000	25,831.79 92	25,831.79 92	1.8450	3.7806	27,004.53 60
Maximum	72.7682	61.4905	21.8570	0.2363	13.8536	1.0037	14.8573	5.2304	0.9381	6.1685	0.0000	25,831.79 92	25,831.79 92	1.8450	3.7806	27,004.53 60

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	72.7682	61.4905	21.8570	0.2363	13.8536	1.0037	14.8573	5.2304	0.9381	6.1685	0.0000	25,831.7992	25,831.7992	1.8450	3.7806	27,004.5360
Maximum	72.7682	61.4905	21.8570	0.2363	13.8536	1.0037	14.8573	5.2304	0.9381	6.1685	0.0000	25,831.7992	25,831.7992	1.8450	3.7806	27,004.5360

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Energy	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Mobile	0.8647	0.8784	7.7800	0.0171	1.8032	0.0129	1.8161	0.4804	0.0120	0.4924		1,775.9728	1,775.9728	0.1159	0.0734	1,800.7361
Total	2.2962	1.0179	11.9503	0.0180	1.8032	0.0432	1.8464	0.4804	0.0424	0.5227	0.0000	1,900.6783	1,900.6783	0.1253	0.0755	1,926.3178

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Energy	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Mobile	0.8647	0.8784	7.7800	0.0171	1.8032	0.0129	1.8161	0.4804	0.0120	0.4924		1,775.9728	1,775.9728	0.1159	0.0734	1,800.7361
Total	2.2962	1.0179	11.9503	0.0180	1.8032	0.0432	1.8464	0.4804	0.0424	0.5227	0.0000	1,900.6783	1,900.6783	0.1253	0.0755	1,926.3178

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 1.77****Residential Indoor: 101,250; Residential Outdoor: 33,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,626 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,156.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041
Total	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041
Total	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.4866	0.0000	7.4866	3.4859	0.0000	3.4859			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.4866	0.6044	8.0909	3.4859	0.5560	4.0419		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8138	47.0059	12.9126	0.2150	6.2848	0.3989	6.6838	1.7227	0.3817	2.1044		23,761.89 91	23,761.89 91	1.1975	3.7788	24,917.90 56
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801
Total	0.8411	47.0229	13.1532	0.2157	6.3670	0.3994	6.7664	1.7445	0.3821	2.1266		23,836.18 44	23,836.18 44	1.1995	3.7806	24,992.78 57

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.4866	0.0000	7.4866	3.4859	0.0000	3.4859			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.4866	0.6044	8.0909	3.4859	0.5560	4.0419	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8138	47.0059	12.9126	0.2150	6.2848	0.3989	6.6838	1.7227	0.3817	2.1044		23,761.89 91	23,761.89 91	1.1975	3.7788	24,917.90 56
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801
Total	0.8411	47.0229	13.1532	0.2157	6.3670	0.3994	6.7664	1.7445	0.3821	2.1266		23,836.18 44	23,836.18 44	1.1995	3.7806	24,992.78 57

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0215	0.7716	0.2781	3.6900e-003	0.1219	4.7000e-003	0.1266	0.0351	4.5000e-003	0.0396		397.8845	397.8845	0.0121	0.0576	415.3540
Worker	0.1860	0.1155	1.6363	4.9400e-003	0.5586	3.0000e-003	0.5616	0.1482	2.7700e-003	0.1509		505.1404	505.1404	0.0135	0.0124	509.1845
Total	0.2075	0.8871	1.9144	8.6300e-003	0.6805	7.7000e-003	0.6882	0.1833	7.2700e-003	0.1905		903.0249	903.0249	0.0256	0.0701	924.5385

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0215	0.7716	0.2781	3.6900e-003	0.1219	4.7000e-003	0.1266	0.0351	4.5000e-003	0.0396		397.8845	397.8845	0.0121	0.0576	415.3540
Worker	0.1860	0.1155	1.6363	4.9400e-003	0.5586	3.0000e-003	0.5616	0.1482	2.7700e-003	0.1509		505.1404	505.1404	0.0135	0.0124	509.1845
Total	0.2075	0.8871	1.9144	8.6300e-003	0.6805	7.7000e-003	0.6882	0.1833	7.2700e-003	0.1905		903.0249	903.0249	0.0256	0.0701	924.5385

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.4637					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3439	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4
Paving	0.4637					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3439	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5382					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	72.7299	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0383	0.0238	0.3369	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		103.9995	103.9995	2.7800e-003	2.5600e-003	104.8321
Total	0.0383	0.0238	0.3369	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		103.9995	103.9995	2.7800e-003	2.5600e-003	104.8321

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5382					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	72.7299	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0383	0.0238	0.3369	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		103.9995	103.9995	2.7800e-003	2.5600e-003	104.8321
Total	0.0383	0.0238	0.3369	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		103.9995	103.9995	2.7800e-003	2.5600e-003	104.8321

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8647	0.8784	7.7800	0.0171	1.8032	0.0129	1.8161	0.4804	0.0120	0.4924		1,775.9728	1,775.9728	0.1159	0.0734	1,800.7361
Unmitigated	0.8647	0.8784	7.7800	0.0171	1.8032	0.0129	1.8161	0.4804	0.0120	0.4924		1,775.9728	1,775.9728	0.1159	0.0734	1,800.7361

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	300.00	271.00	225.50	814,373	814,373
Parking Lot	0.00	0.00	0.00		
Total	300.00	271.00	225.50	814,373	814,373

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
NaturalGas Unmitigated	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	996.719	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	0.996719	0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0108	0.0919	0.0391	5.9000e-004		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		117.2611	117.2611	2.2500e-003	2.1500e-003	117.9579

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238
Unmitigated	1.4208	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1247	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4445	7.4445	7.1700e-003		7.6238
Total	1.4207	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1247	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229		7.4445	7.4445	7.1700e-003		7.6238
Total	1.4207	0.0476	4.1312	2.2000e-004		0.0229	0.0229		0.0229	0.0229	0.0000	7.4445	7.4445	7.1700e-003	0.0000	7.6238

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	77.10	1000sqft	1.77	77,101.00	0
Apartments Mid Rise	50.00	Dwelling Unit	0.43	50,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 50 units
0.43 acre building footprint
2.2 acres
Construction Phase -
Grading - 17,250 cy export
Architectural Coating - SDAPCD Rule 67.0.1
Vehicle Trips - 6 trips/du weekday trip rates
Woodstoves - No woodstoves or fireplaces
Area Coating - SDAPCD Rule 67.0.1
Trips and VMT -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	27.50	0.00
tblFireplaces	NumberNoFireplace	5.00	50.00
tblFireplaces	NumberWood	17.50	0.00
tblGrading	MaterialExported	0.00	17,250.00
tblLandUse	LandUseSquareFeet	77,100.00	77,101.00
tblLandUse	LotAcreage	1.32	0.43
tblVehicleTrips	ST_TR	4.91	5.42
tblVehicleTrips	SU_TR	4.09	4.51
tblVehicleTrips	WD_TR	5.44	6.00
tblWoodstoves	NumberCatalytic	2.50	0.00
tblWoodstoves	NumberNoncatalytic	2.50	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	0.6693	0.6693
2	4-2-2023	7-1-2023	0.5340	0.5340
3	7-2-2023	9-30-2023	0.5340	0.5340
		Highest	0.6693	0.6693

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225
Energy	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	73.0519	73.0519	3.6500e-003	7.5000e-004	73.3676
Mobile	0.1436	0.1629	1.3522	2.8500e-003	0.3046	2.2300e-003	0.3069	0.0813	2.0800e-003	0.0834	0.0000	268.1350	268.1350	0.0189	0.0120	272.1864
Waste						0.0000	0.0000		0.0000	0.0000	4.6688	0.0000	4.6688	0.2759	0.0000	11.5667
Water						0.0000	0.0000		0.0000	0.0000	1.0335	15.9783	17.0118	0.1071	2.6200e-003	20.4722
Total	0.3933	0.1839	1.7311	2.9800e-003	0.3046	5.6500e-003	0.3103	0.0813	5.5000e-003	0.0868	5.7023	357.7730	363.4753	0.4062	0.0154	378.2154

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225
Energy	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	73.0519	73.0519	3.6500e-003	7.5000e-004	73.3676
Mobile	0.1436	0.1629	1.3522	2.8500e-003	0.3046	2.2300e-003	0.3069	0.0813	2.0800e-003	0.0834	0.0000	268.1350	268.1350	0.0189	0.0120	272.1864
Waste						0.0000	0.0000		0.0000	0.0000	4.6688	0.0000	4.6688	0.2759	0.0000	11.5667
Water						0.0000	0.0000		0.0000	0.0000	1.0335	15.9783	17.0118	0.1071	2.6200e-003	20.4722
Total	0.3933	0.1839	1.7311	2.9800e-003	0.3046	5.6500e-003	0.3103	0.0813	5.5000e-003	0.0868	5.7023	357.7730	363.4753	0.4062	0.0154	378.2154

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	

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4	Paving	Paving	11/17/2023	11/30/2023	5	10
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 1.77****Residential Indoor: 101,250; Residential Outdoor: 33,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,626 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	2,156.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	68.00	18.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	2.3900e-003	8.1000e-004	3.2000e-003	2.6000e-004	7.5000e-004	1.0100e-003	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0771	0.0771	0.0000	0.0000	0.0778
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0771	0.0771	0.0000	0.0000	0.0778

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e-003	0.0214	0.0147	4.0000e-005		8.1000e-004	8.1000e-004		7.5000e-004	7.5000e-004	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578
Total	1.9500e-003	0.0214	0.0147	4.0000e-005	2.3900e-003	8.1000e-004	3.2000e-003	2.6000e-004	7.5000e-004	1.0100e-003	0.0000	3.2317	3.2317	1.0500e-003	0.0000	3.2578

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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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0771	0.0771	0.0000	0.0000	0.0778
Total	3.0000e-005	2.0000e-005	2.7000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0771	0.0771	0.0000	0.0000	0.0778

3.3 Grading - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0225	0.0000	0.0225	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	4.0000e-003	0.0434	0.0261	6.0000e-005	0.0225	1.8100e-003	0.0243	0.0105	1.6700e-003	0.0121	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3800e-003	0.1463	0.0389	6.5000e-004	0.0185	1.2000e-003	0.0197	5.0700e-003	1.1500e-003	6.2200e-003	0.0000	64.6957	64.6957	3.2600e-003	0.0103	67.8431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.9000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1928	0.1928	1.0000e-005	1.0000e-005	0.1945
Total	2.4600e-003	0.1464	0.0396	6.5000e-004	0.0187	1.2000e-003	0.0199	5.1300e-003	1.1500e-003	6.2900e-003	0.0000	64.8884	64.8884	3.2700e-003	0.0103	68.0376

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0225	0.0000	0.0225	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e-003	0.0434	0.0261	6.0000e-005		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751
Total	4.0000e-003	0.0434	0.0261	6.0000e-005	0.0225	1.8100e-003	0.0243	0.0105	1.6700e-003	0.0121	0.0000	5.4312	5.4312	1.7600e-003	0.0000	5.4751

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3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3800e-003	0.1463	0.0389	6.5000e-004	0.0185	1.2000e-003	0.0197	5.0700e-003	1.1500e-003	6.2200e-003	0.0000	64.6957	64.6957	3.2600e-003	0.0103	67.8431
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.9000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1928	0.1928	1.0000e-005	1.0000e-005	0.1945
Total	2.4600e-003	0.1464	0.0396	6.5000e-004	0.0187	1.2000e-003	0.0199	5.1300e-003	1.1500e-003	6.2900e-003	0.0000	64.8884	64.8884	3.2700e-003	0.0103	68.0376

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4723	228.4723	0.0432	0.0000	229.5525
Total	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4723	228.4723	0.0432	0.0000	229.5525

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3200e-003	0.0879	0.0310	4.1000e-004	0.0132	5.2000e-004	0.0137	3.8000e-003	5.0000e-004	4.2900e-003	0.0000	39.7288	39.7288	1.2000e-003	5.7600e-003	41.4743
Worker	0.0202	0.0140	0.1709	5.2000e-004	0.0600	3.3000e-004	0.0603	0.0159	3.0000e-004	0.0162	0.0000	48.0594	48.0594	1.4100e-003	1.3200e-003	48.4892
Total	0.0226	0.1019	0.2019	9.3000e-004	0.0731	8.5000e-004	0.0740	0.0197	8.0000e-004	0.0205	0.0000	87.7881	87.7881	2.6100e-003	7.0800e-003	89.9635

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4720	228.4720	0.0432	0.0000	229.5522
Total	0.1885	1.4986	1.5636	2.7500e-003		0.0675	0.0675		0.0647	0.0647	0.0000	228.4720	228.4720	0.0432	0.0000	229.5522

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3200e-003	0.0879	0.0310	4.1000e-004	0.0132	5.2000e-004	0.0137	3.8000e-003	5.0000e-004	4.2900e-003	0.0000	39.7288	39.7288	1.2000e-003	5.7600e-003	41.4743
Worker	0.0202	0.0140	0.1709	5.2000e-004	0.0600	3.3000e-004	0.0603	0.0159	3.0000e-004	0.0162	0.0000	48.0594	48.0594	1.4100e-003	1.3200e-003	48.4892
Total	0.0226	0.1019	0.2019	9.3000e-004	0.0731	8.5000e-004	0.0740	0.0197	8.0000e-004	0.0205	0.0000	87.7881	87.7881	2.6100e-003	7.0800e-003	89.9635

3.5 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	2.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7200e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179

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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					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862
Total	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	2.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7200e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178

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3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862
Total	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3627					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.3637	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.6000e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4498	0.4498	1.0000e-005	1.0000e-005	0.4538
Total	1.9000e-004	1.3000e-004	1.6000e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4498	0.4498	1.0000e-005	1.0000e-005	0.4538

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3627					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.3637	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	1.3000e-004	1.6000e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4498	0.4498	1.0000e-005	1.0000e-005	0.4538
Total	1.9000e-004	1.3000e-004	1.6000e-003	0.0000	5.6000e-004	0.0000	5.6000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4498	0.4498	1.0000e-005	1.0000e-005	0.4538

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1436	0.1629	1.3522	2.8500e-003	0.3046	2.2300e-003	0.3069	0.0813	2.0800e-003	0.0834	0.0000	268.1350	268.1350	0.0189	0.0120	272.1864
Unmitigated	0.1436	0.1629	1.3522	2.8500e-003	0.3046	2.2300e-003	0.3069	0.0813	2.0800e-003	0.0834	0.0000	268.1350	268.1350	0.0189	0.0120	272.1864

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	300.00	271.00	225.50	814,373	814,373
Parking Lot	0.00	0.00	0.00		
Total	300.00	271.00	225.50	814,373	814,373

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Parking Lot	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53.6380	53.6380	3.2800e-003	4.0000e-004	53.8383
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	53.6380	53.6380	3.2800e-003	4.0000e-004	53.8383
NaturalGas Mitigated	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293
NaturalGas Unmitigated	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	363803	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293

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	363803	1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		1.9600e-003	0.0168	7.1300e-003	1.1000e-004		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003	0.0000	19.4139	19.4139	3.7000e-004	3.6000e-004	19.5293

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	192007	47.0284	2.8700e-003	3.5000e-004	47.2041
Parking Lot	26985.3	6.6095	4.0000e-004	5.0000e-005	6.6342
Total		53.6380	3.2700e-003	4.0000e-004	53.8383

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	192007	47.0284	2.8700e-003	3.5000e-004	47.2041
Parking Lot	26985.3	6.6095	4.0000e-004	5.0000e-005	6.6342
Total		53.6380	3.2700e-003	4.0000e-004	53.8383

6.0 Area Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225
Unmitigated	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0363					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0112	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225
Total	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0363					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0112	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225
Total	0.2478	4.2800e-003	0.3718	2.0000e-005		2.0600e-003	2.0600e-003		2.0600e-003	2.0600e-003	0.0000	0.6078	0.6078	5.9000e-004	0.0000	0.6225

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.0118	0.1071	2.6200e-003	20.4722
Unmitigated	17.0118	0.1071	2.6200e-003	20.4722

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.2577 / 2.05377	17.0118	0.1071	2.6200e-003	20.4722
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.0118	0.1071	2.6200e-003	20.4722

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	3.2577 / 2.05377	17.0118	0.1071	2.6200e-003	20.4722
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		17.0118	0.1071	2.6200e-003	20.4722

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	4.6688	0.2759	0.0000	11.5667
Unmitigated	4.6688	0.2759	0.0000	11.5667

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	23	4.6688	0.2759	0.0000	11.5667
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.6688	0.2759	0.0000	11.5667

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	23	4.6688	0.2759	0.0000	11.5667
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		4.6688	0.2759	0.0000	11.5667

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT 2

CalEEMod Output – Industrial and Commercial Project Emissions

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Santa Fe Residential - Existing Designations
San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	38.00	1000sqft	1.47	38,000.00	0
Strip Mall	24.00	1000sqft	0.80	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 1.47 acres LI, 0.8 acre C
Construction Phase -
Architectural Coating - SDAPCD Rule 67.0.1
Vehicle Trips - SANDAG trip rates
Area Coating - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblLandUse	LotAcreage	0.87	1.47
tblLandUse	LotAcreage	0.55	0.80
tblVehicleTrips	ST_TR	1.99	3.21
tblVehicleTrips	ST_TR	42.04	37.94
tblVehicleTrips	SU_TR	5.00	8.06
tblVehicleTrips	SU_TR	20.43	18.44
tblVehicleTrips	WD_TR	4.96	8.00
tblVehicleTrips	WD_TR	44.32	40.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	64.8647	14.4867	14.9224	0.0287	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,679.3694	2,679.3694	0.7698	0.0368	2,701.4625
Maximum	64.8647	14.4867	14.9224	0.0287	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,679.3694	2,679.3694	0.7698	0.0368	2,701.4625

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	64.8647	14.4867	14.9224	0.0287	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,679.3694	2,679.3694	0.7698	0.0368	2,701.4625
Maximum	64.8647	14.4867	14.9224	0.0287	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,679.3694	2,679.3694	0.7698	0.0368	2,701.4625

[illegible]

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Energy	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
Mobile	2.9376	2.9118	24.5493	0.0460	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,767.1643	4,767.1643	0.3947	0.2400	4,848.5349
Total	4.4567	3.0437	24.6664	0.0468	4.9946	0.0475	5.0421	1.3305	0.0450	1.3755		4,925.4502	4,925.4502	0.3977	0.2429	5,007.7623

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Energy	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
Mobile	2.9376	2.9118	24.5493	0.0460	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,767.1643	4,767.1643	0.3947	0.2400	4,848.5349
Total	4.4567	3.0437	24.6664	0.0468	4.9946	0.0475	5.0421	1.3305	0.0450	1.3755		4,925.4502	4,925.4502	0.3977	0.2429	5,007.7623

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 93,000; Non-Residential Outdoor: 31,000; 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
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755
Total	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755
Total	0.0237	0.0153	0.1829	5.5000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		56.1616	56.1616	1.6900e-003	1.5800e-003	56.6755

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444
Total	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444
Total	0.0297	0.0191	0.2287	6.9000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		70.2020	70.2020	2.1200e-003	1.9800e-003	70.8444

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4467	0.1592	2.0500e-003	0.0677	2.6200e-003	0.0704	0.0195	2.5100e-003	0.0220		221.3612	221.3612	6.6700e-003	0.0321	231.0880
Worker	0.0712	0.0458	0.5488	1.6500e-003	0.1972	1.0600e-003	0.1982	0.0523	9.8000e-004	0.0533		168.4849	168.4849	5.0800e-003	4.7500e-003	170.0266
Total	0.0828	0.4926	0.7079	3.7000e-003	0.2649	3.6800e-003	0.2686	0.0718	3.4900e-003	0.0753		389.8461	389.8461	0.0118	0.0368	401.1146

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4467	0.1592	2.0500e-003	0.0677	2.6200e-003	0.0704	0.0195	2.5100e-003	0.0220		221.3612	221.3612	6.6700e-003	0.0321	231.0880
Worker	0.0712	0.0458	0.5488	1.6500e-003	0.1972	1.0600e-003	0.1982	0.0523	9.8000e-004	0.0533		168.4849	168.4849	5.0800e-003	4.7500e-003	170.0266
Total	0.0828	0.4926	0.7079	3.7000e-003	0.2649	3.6800e-003	0.2686	0.0718	3.4900e-003	0.0753		389.8461	389.8461	0.0118	0.0368	401.1146

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666
Total	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666
Total	0.0445	0.0287	0.3430	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		105.3031	105.3031	3.1800e-003	2.9700e-003	106.2666

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.6583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	64.8499	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	9.5500e-003	0.1143	3.4000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		35.1010	35.1010	1.0600e-003	9.9000e-004	35.4222
Total	0.0148	9.5500e-003	0.1143	3.4000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		35.1010	35.1010	1.0600e-003	9.9000e-004	35.4222

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.6583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	64.8499	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	9.5500e-003	0.1143	3.4000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		35.1010	35.1010	1.0600e-003	9.9000e-004	35.4222
Total	0.0148	9.5500e-003	0.1143	3.4000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		35.1010	35.1010	1.0600e-003	9.9000e-004	35.4222

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9376	2.9118	24.5493	0.0460	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,767.164 3	4,767.164 3	0.3947	0.2400	4,848.534 9
Unmitigated	2.9376	2.9118	24.5493	0.0460	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,767.164 3	4,767.164 3	0.3947	0.2400	4,848.534 9

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	304.00	121.98	306.28	812,567	812,567
Strip Mall	960.00	910.56	442.56	1,353,715	1,353,715
Total	1,264.00	1,032.54	748.84	2,166,282	2,166,282

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
NaturalGas Unmitigated	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1199.34	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Strip Mall	145.973	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1733	17.1733	3.3000e-004	3.1000e-004	17.2753
Total		0.0145	0.1319	0.1108	8.0000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1.19934	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Strip Mall	0.145973	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1733	17.1733	3.3000e-004	3.1000e-004	17.2753
Total		0.0145	0.1319	0.1108	8.0000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

6.0 Area Detail

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Unmitigated	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3268					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Total	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3268					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Total	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

7.0 Water Detail

7.1 Mitigation Measures Water

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Santa Fe Residential - Existing Designations
San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	38.00	1000sqft	1.47	38,000.00	0
Strip Mall	24.00	1000sqft	0.80	24,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - 1.47 acres LI, 0.8 acre C
Construction Phase -
Architectural Coating - SDAPCD Rule 67.0.1
Vehicle Trips - SANDAG trip rates
Area Coating - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblLandUse	LotAcreage	0.87	1.47
tblLandUse	LotAcreage	0.55	0.80
tblVehicleTrips	ST_TR	1.99	3.21
tblVehicleTrips	ST_TR	42.04	37.94
tblVehicleTrips	SU_TR	5.00	8.06
tblVehicleTrips	SU_TR	20.43	18.44
tblVehicleTrips	WD_TR	4.96	8.00
tblVehicleTrips	WD_TR	44.32	40.00

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	64.8636	14.4846	14.9465	0.0288	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,688.8551	2,688.8551	0.7697	0.0364	2,710.8123
Maximum	64.8636	14.4846	14.9465	0.0288	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,688.8551	2,688.8551	0.7697	0.0364	2,710.8123

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	64.8636	14.4846	14.9465	0.0288	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,688.8551	2,688.8551	0.7697	0.0364	2,710.8123
Maximum	64.8636	14.4846	14.9465	0.0288	7.1647	0.6173	7.7695	3.4465	0.5915	4.0029	0.0000	2,688.8551	2,688.8551	0.7697	0.0364	2,710.8123

[illegible]

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Energy	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
Mobile	3.0364	2.6813	23.4849	0.0481	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,980.2169	4,980.2169	0.3675	0.2269	5,057.0286
Total	4.5554	2.8132	23.6020	0.0489	4.9946	0.0475	5.0421	1.3305	0.0450	1.3754		5,138.5028	5,138.5028	0.3706	0.2298	5,216.2559

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Energy	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
Mobile	3.0364	2.6813	23.4849	0.0481	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,980.2169	4,980.2169	0.3675	0.2269	5,057.0286
Total	4.5554	2.8132	23.6020	0.0489	4.9946	0.0475	5.0421	1.3305	0.0450	1.3754		5,138.5028	5,138.5028	0.3706	0.2298	5,216.2559

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	1/2/2023	1/4/2023	5	3	
2	Grading	Grading	1/5/2023	1/12/2023	5	6	
3	Building Construction	Building Construction	1/13/2023	11/16/2023	5	220	
4	Paving	Paving	11/17/2023	11/30/2023	5	10	
5	Architectural Coating	Architectural Coating	12/1/2023	12/14/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5**Acres of Grading (Grading Phase): 6****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 93,000; Non-Residential Outdoor: 31,000; 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
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985		2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703		2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041
Total	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.3027	14.2802	9.7820	0.0245		0.5419	0.5419		0.4985	0.4985	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4
Total	1.3027	14.2802	9.7820	0.0245	1.5908	0.5419	2.1326	0.1718	0.4985	0.6703	0.0000	2,374.863 4	2,374.863 4	0.7681		2,394.065 4

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041
Total	0.0219	0.0136	0.1925	5.8000e-004	0.0657	3.5000e-004	0.0661	0.0174	3.3000e-004	0.0178		59.4283	59.4283	1.5900e-003	1.4600e-003	59.9041

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801
Total	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801
Total	0.0274	0.0170	0.2406	7.3000e-004	0.0822	4.4000e-004	0.0826	0.0218	4.1000e-004	0.0222		74.2854	74.2854	1.9900e-003	1.8300e-003	74.8801

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0119	0.4287	0.1545	2.0500e-003	0.0677	2.6100e-003	0.0703	0.0195	2.5000e-003	0.0220		221.0470	221.0470	6.7000e-003	0.0320	230.7522
Worker	0.0656	0.0408	0.5775	1.7400e-003	0.1972	1.0600e-003	0.1982	0.0523	9.8000e-004	0.0533		178.2849	178.2849	4.7700e-003	4.3900e-003	179.7122
Total	0.0776	0.4694	0.7320	3.7900e-003	0.2649	3.6700e-003	0.2686	0.0718	3.4800e-003	0.0753		399.3318	399.3318	0.0115	0.0364	410.4644

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Building Construction - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0119	0.4287	0.1545	2.0500e-003	0.0677	2.6100e-003	0.0703	0.0195	2.5000e-003	0.0220		221.0470	221.0470	6.7000e-003	0.0320	230.7522
Worker	0.0656	0.0408	0.5775	1.7400e-003	0.1972	1.0600e-003	0.1982	0.0523	9.8000e-004	0.0533		178.2849	178.2849	4.7700e-003	4.3900e-003	179.7122
Total	0.0776	0.4694	0.7320	3.7900e-003	0.2649	3.6700e-003	0.2686	0.0718	3.4800e-003	0.0753		399.3318	399.3318	0.0115	0.0364	410.4644

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.9926	1,709.9926	0.5420		1,723.5414

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.9926	1,709.9926	0.5420		1,723.5414

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		111.4280	111.4280	2.9800e-003	2.7400e-003	112.3201

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.6583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	64.8499	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	8.4900e-003	0.1203	3.6000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		37.1427	37.1427	9.9000e-004	9.1000e-004	37.4400
Total	0.0137	8.4900e-003	0.1203	3.6000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		37.1427	37.1427	9.9000e-004	9.1000e-004	37.4400

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	64.6583					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	64.8499	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0137	8.4900e-003	0.1203	3.6000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		37.1427	37.1427	9.9000e-004	9.1000e-004	37.4400
Total	0.0137	8.4900e-003	0.1203	3.6000e-004	0.0411	2.2000e-004	0.0413	0.0109	2.0000e-004	0.0111		37.1427	37.1427	9.9000e-004	9.1000e-004	37.4400

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0364	2.6813	23.4849	0.0481	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,980.2169	4,980.2169	0.3675	0.2269	5,057.0286
Unmitigated	3.0364	2.6813	23.4849	0.0481	4.9946	0.0375	5.0321	1.3305	0.0349	1.3654		4,980.2169	4,980.2169	0.3675	0.2269	5,057.0286

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	304.00	121.98	306.28	812,567	812,567
Strip Mall	960.00	910.56	442.56	1,353,715	1,353,715
Total	1,264.00	1,032.54	748.84	2,166,282	2,166,282

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129
NaturalGas Unmitigated	0.0145	0.1319	0.1108	7.9000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1199.34	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Strip Mall	145.973	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1733	17.1733	3.3000e-004	3.1000e-004	17.2753
Total		0.0145	0.1319	0.1108	8.0000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	1.19934	0.0129	0.1176	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.0991	141.0991	2.7000e-003	2.5900e-003	141.9376
Strip Mall	0.145973	1.5700e-003	0.0143	0.0120	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003		17.1733	17.1733	3.3000e-004	3.1000e-004	17.2753
Total		0.0145	0.1319	0.1108	8.0000e-004		0.0100	0.0100		0.0100	0.0100		158.2724	158.2724	3.0300e-003	2.9000e-003	159.2129

6.0 Area Detail

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Unmitigated	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3268					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Total	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

Santa Fe Residential - Existing Designations - San Diego County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1772					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3268					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-004	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145
Total	1.5045	6.0000e-005	6.3200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0136	0.0136	4.0000e-005		0.0145

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
