AIR QUALITY ASSESSMENT

Hope Avenue
Residential Development
Carlsbad, CA

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1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality (AQ) is to provide a site-specific analysis for the proposed Hope apartments including necessary offsite roadways to serve the project. This report will identify AQ impacts (if any) that may result from implementation of the proposed Project. It should be noted that the proposed project is consistent with the City's General Plan as developed and includes a density bonus consistent with State Density Bonus Law (California, 2021) for affordable housing.

1.2 Project Location

The proposed project is located within the City of Carlsbad, CA. More specifically, the project site is located west of Interstate 5 (I-5) and north of the intersection of Carlsbad Village Drive and Hope Avenue. Access to the project site is from Carlsbad Village Drive. A general project vicinity map is shown in Figure 1-A.

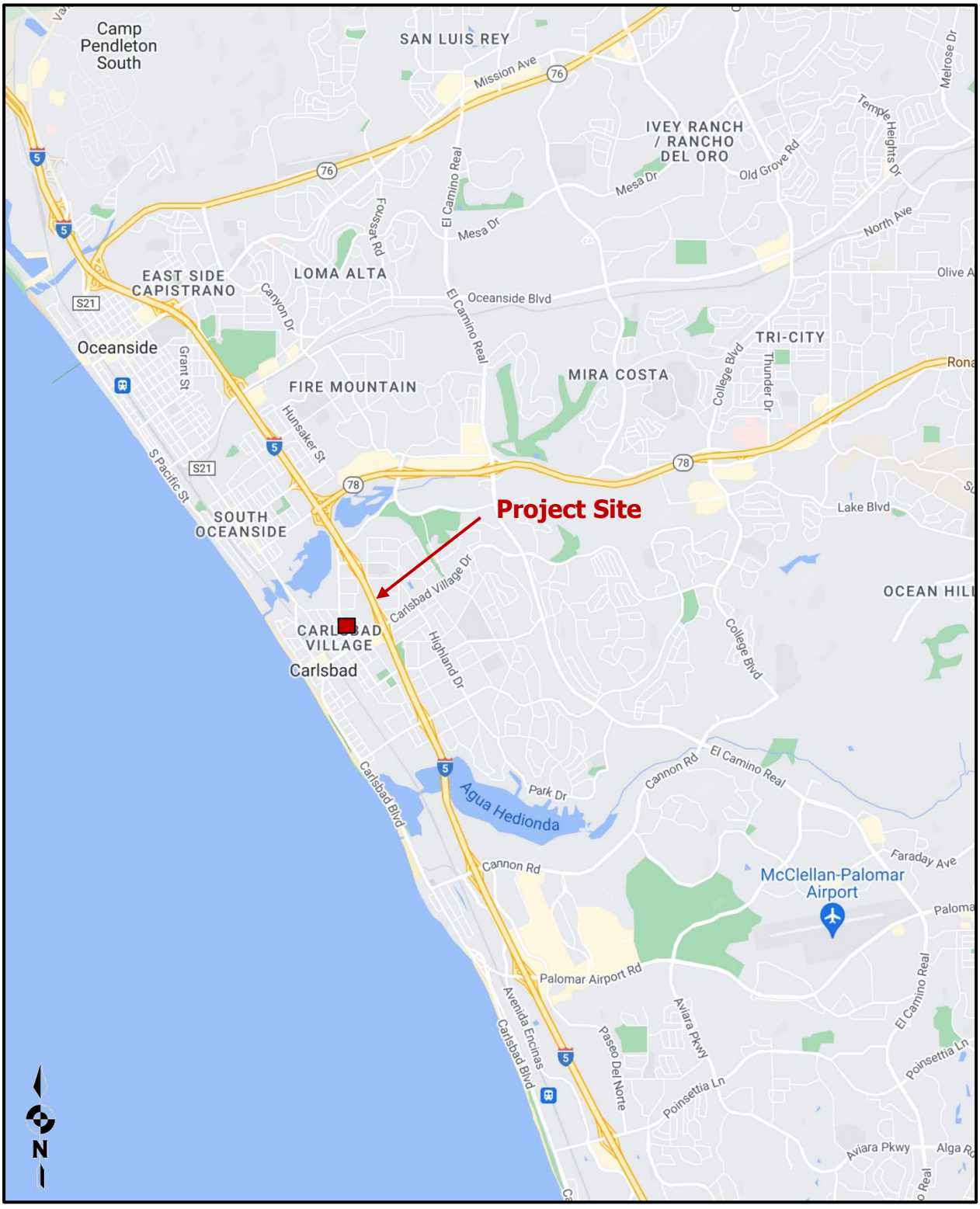
1.3 Project Description

The Hope project site is zoned Village-Barrio Master Plan / Freeway Commercial and would allow for a development density of up to 35 dwelling units (DU) per acre. The project would provide affordable housing and can have a state bonus density up to 52 DU per acre or 156-units (California, 2021). Based on this, the project would remain consistent with existing zoning for the 2.95 acre site.

The project consists of 156 multi-family apartment units, fitness center, community pool, and an existing fast food restaurant to remain. The existing site conditions are characterized as disturbed land that is currently utilized as a Motel and Carl's Jr fast-food restaurant. A project site plan for the project is shown in Figure 1-B.

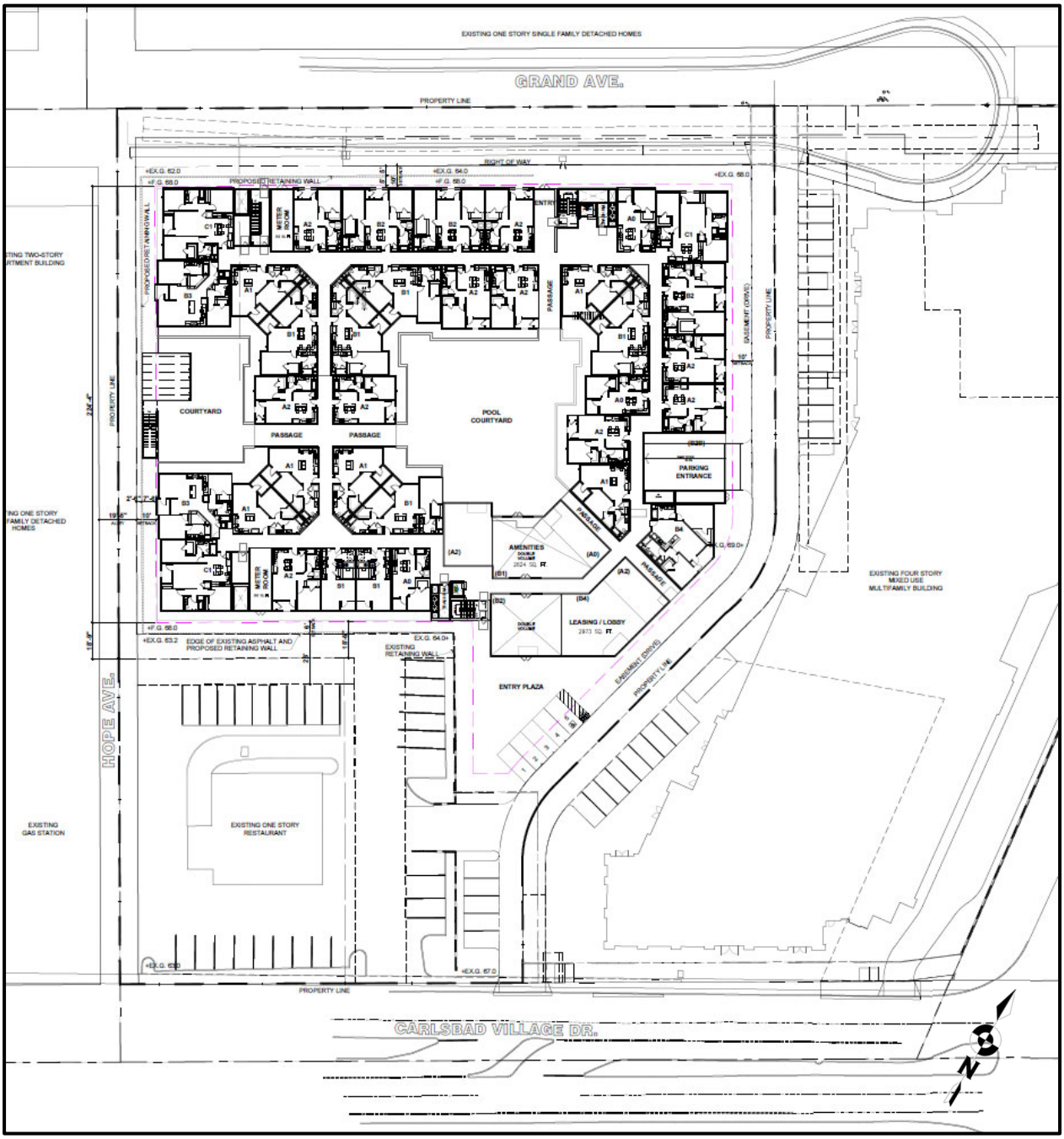
Actual construction dates will vary but it was assumed that construction would begin as early as June 2024 and be completed and operational sometime in 2025. The project would demolish rough 31,000 SF of existing buildings which includes an existing hotel and the single family units.

Figure 1-A: Project Vicinity Map



Source: (Google, 2022)

Figure 1-B: Proposed Project Site Plan



Source: (AO Architecture, 2022)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The subject property is vacant and was previously graded sometime in the past. The project site is surrounded by similar type residential developments. The site is generally hilly with onsite elevations ranging between 60 and 70 feet above mean sea level. Additionally, no significant structures are identified onsite. Furthermore, surrounding land uses are commercial and residential.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heats up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high-pressure system drops to the south and brings cooler, moister weather from the north.

Meteorological trends within Carlsbad produce daytime highs typically ranging between 66ºF in the winter to approximately 80ºF in the summer with August usually being the hottest month. Median temperatures range from approximately 55ºF in the winter to approximately 71ºF in the summer. The average humidity is approximately 64% in the winter and about 72% in the summer (City-Data, 2021).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. ***Primary Standards*** set limits to protect public health which includes sensitive populations such as asthmatics, children and elderly. ***Secondary Standards*** set limits to protect public welfare and include protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The Environmental Protection Agency's (EPA Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. ***Carbon Monoxide (CO):*** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. ***Lead (Pb):*** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. ***Nitrogen Dioxide (NO_2):*** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO_2 is usually visible as a reddish-brown air layer over urban areas. NO_2 along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO_2 above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO_2 exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. ***Particulate Matter (PM_{10} or $PM_{2.5}$):*** *is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM_{10} particles are 10 microns (µm) or less and $PM_{2.5}$ particles are 2.5 (µm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.*
5. ***Ozone (O_3)****: is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources.*

Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.

6. ***Sulfur Dioxide (SO_2)**: is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO_2 exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO_2 results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.*

2.3.2 State Standards and Definitions

The State of California Air Resources Board (ARB) sets the laws and regulations for air quality at State level. The California Ambient Air Quality Standards (CAAQS) are either the same as or more restrictive than the NAAQS in that the State standards also restrict four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. ***Visibility Reducing Particles**: Particles in the Air that obstruct the visibility.*
2. ***Sulfates**: are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. ***Hydrogen Sulfide (H_2S)**: is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H_2S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H_2S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 ppm) can cause a loss of consciousness and possibly death.*
4. ***Vinyl Chloride**: also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Average Time**	**California Standards[1]**		**Federal Standards[2]**		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter (PM2.5)[9]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3	15 µg/m3	
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)		0.100 ppm[8] (188/ µg/m3)	-	
Sulfur Dioxide (SO_2)[11]	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm[10] (for Certain Areas)	-	Ultraviolet Flourescence; Spectrophotometry (Pararoosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm[10] (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m3)	
	1 Hour	0.25 ppm (655 µg/m3)		75 ppb (196 µg/m3)	-	
Lead[12,13]	30 Day Average	1.5 µg/m3	Atomic Absorption	-		-
	Calendar Quarter	-		1.5 µg/m3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m3		
Visibility Reducing Particles	8 Hour	See footnote 13				
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, 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 PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, 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 procedure which can be shown to the satisfaction of the ARB 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 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 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 PM2.5 primary standard was lowered from 15 µg/m3 to 12.0 µg/m3 . The existing national 24- hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3 , as was the annual secondary standard of 15 µg/m3 . The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 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 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard 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 SO2 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 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, 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: (California Air Resources Board, 05/04/2016)

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as "non-attainment areas" for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the $PM_{2.5}$ standard and many areas are in non-attainment for PM_{10} as well. California therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed to attain ambient air quality standards.

The San Diego Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within the county. Therefore, the SDAPCD developed a RAQS to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_X). Currently, San Diego is in "non-attainment" status for federal and state O_3 and state PM_{10} and $PM_{2.5.}$ An attainment plan is available for O_3. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered NO_X and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NO_X reduction measures. NO_X and VOCs are precursors to the formation of ozone in the atmosphere. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status for criteria pollutants with respect to both federal and state nonattainment status by pollutants for County is shown in Table 2.2 on the following page (SDAPCD, 2019).

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the Project produces unmitigable air quality emissions or if the Project produces cumulative impacts.

Table 2.2: San Diego County Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment *	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable **	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

** The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.*
*** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.*
(SDAPCD, 2019)

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA guidelines and are as follows:

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

A: Conflict with or obstruct implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP)?

B: 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 (PM10, PM2.5 or exceed quantitative thresholds for O3 precursors, oxides of nitrogen [NOX] and Volatile Organic Compounds [VOCs])?

C: Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations?

D: Result in other emission (such as those leading to odors) adversely affecting a substantial number of people?

2.5 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. These screening criteria can be used to demonstrate that a project's total emissions would not result in a significant impact as defined by CEQA. Also, since SDAPCD does not have AQI threshold for Volatile Organic Compounds (VOCs), it is acceptable to use the Coachella Valley VOC threshold from South Coast Air Quality Management District. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3 below.

Table 2.3: Screening Level Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75
Operational Emissions	
Respirable Particulate Matter (PM_{10} and $PM_{2.5}$)	100 and 55
Nitrogen Oxide (NO_x)	250
Sulfur Oxide (SO_x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75

Non-Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk to between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the cancer risk to over 10 in one million. At no time shall the project increase the cancer risk to over 10 in one million or

a health hazard index (chronic and acute) greater than one. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology.

The U.S. Environmental Protection Agency (U.S. EPA) uses the term Volatile Organic Compounds (VOC) and the California Air Resources Board's (CARB's) Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term however for purposes of this study we will assume they are essentially the same due to the fact SCAQMD interchanges these words and because CalEEMod directly calculates ROG in place of VOC.

2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 10 monitoring sites, which collect data on criteria pollutants. The proposed development project is closest to the Camp Pendleton and Carmel Mountain Ranch monitoring stations which are located 8 and 13 miles from the Project site respectively. Table 2.4 identifies the criteria pollutants monitored at the aforementioned station.

Four additional sites collect meteorological data which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport. SDAPCD published the five-year air quality summary for all of the monitoring stations (SDAPCD, 2021).

Table 2.4: Two-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2019	2020	Days Exceeded over 2 years
O_3 (ppm)	Camp Pendleton or Carmel Mountain Ranch	1 Hour	0.09 ppm	No Standard	0.08	0.09	0
		8 Hour	0.070 ppm	0.070 ppm	0.06	0.07	3
PM_{10} (µg/m3)		24 Hour	50 µg/m3	150 µg/m3	PM10 Data Not Available for Monitoring Sites near Project Site		
		Annual Arithmetic Mean	20 µg/m3	No Standard			
* $PM_{2.5}$ (µg/m^3)		24 Hour	No standard -	35 µg/m3	18.9	40.2	N/A
		Annual Arithmetic Mean	12 µg/m3	15 µg/m3	8.2	9.3	N/A
NO_2 (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.014	0.013	N/A
		1 Hour	0.18 ppm	0.100 ppm	0.086	0.056	N/A
* CO (ppm)		1 Hour	20 ppm	35 ppm	4.1	3.3	N/A
		8 Hour	9 ppm	9 ppm	2.5	1.7	N/A

Notes:
1. - Yearly maximums marked with "-" indicated data was not available for either monitoring station.
2. * Data was selected from the Carmel Mountain Ranch station which began in 2019. All other data presented was collected at the Camp Pendleton Monitoring Station.
3. SO_2 is only monitored at the El Cajon Monitoring Station. Within the entire County of San Diego, SO_2 emissions within the County are essentially Zero for all metrics including the Average, Maximum 24 hour and 1- hour standards. The Highest 1-hr measurement identified is 0.004 ppm and the most restrictive standard (CAAQS for SO_2) is 0.25 ppm.

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod (2020.4.0) air quality model, which was developed by Breeze Software for South Coast Air Quality Management District (SCAQMD) in 2021. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in ***Attachment A*** to this report.

The AERSCREEN dispersion model will be used to determine the concentration for air pollutants at any location near the pollutant generator. Additionally, the model will predict the maximum exposure distance and concentrations. The AERSCREEN input/output file for the proposed project is shown in ***Attachment B*** at the end of this report. The worst case exhaust emissions generated from the Project from construction equipment was utilized and calculated within the CalEEMod model.

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHHA, February 2015):

Equation 1 $$Dose_{air}=C_{air}*(BR/BW)*A*EF*(1x10^{-6})$$

$Dose_{air}$	=	Dose through inhalation (mg/kg/d)
C_{air}	=	Concentration in air (µg/m3) Annual average DPM concentration in µg/m3 - AERSCREEN predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1x10-6	=	Milligrams to micrograms conversion (10^{-3} mg/ µg), cubic meters to liters conversion (10^{-3} m^3/l)

Once the dose is determined then you must calculate the cancer risk. The average daily inhalation dose (mg/kg-day) multiplied by the cancer potency factor $(mg/kg\text{-}day)^{-1}$ will give

the inhalation cancer risk (unitless), which is an expression of the chemical's cancer risk during a 70-year lifespan of exposure. For example, an inhalation cancer risk of 5 x 10-6 is the same as stating that an individual has an estimated probability of developing cancer from their exposure of 5 chances per million people exposed.

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models in ***Attachment C*** to this report. The worst case cancer risk calculation is defined in Equation 2 below (OEHHA, February 2015):

Equation 2

$$RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$$

$RISK_{inh\text{-}res}$	=	Residential inhalation cancer risk
$DOSE_{air}$	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor ($mg/kg\text{-}day^{-1}$)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years. Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment (OEHHA, Air Toxics Hot Spots Program - Risk Assessment Guidelines, February 2015). Diesel Exhaust has a REL of 5 $\mu g/m^3$ and targets the respiratory system.

3.2 Construction Emissions Calculations

The project would construct 156 multi-family units and as noted would require demolition of up to 31,000 SF of existing structures prior to starting. Construction of project would begin as early as June 2024 and would be completed and operational in 2025. Table 3.1 shows the expected timeframes for the construction processes. Additionally, it should be noted that as a design feature, the Project would utilize Tier 4 diesel construction equipment with diesel particulate filters (DPF) installed.

Table 3.1: Proposed Construction Phase and Duration

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition of Existing Structures	06/03/2024	07/05/2024	
Concrete/Industrial Saws			1
Excavators			2
Skid Steer Loaders			2
Site Preparation	07/06/2024	07/12/2024	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	07/13/2024	07/24/2024	
Excavators			1
Graders			1
Rubber Tired Dozers			1
Tractors/Loaders/Backhoes			3
Building Construction	07/25/2024	06/11/2025	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	04/17/2025	06/11/2025	
Air Compressors			1
Paving	06/12/2025	07/07/2025	
Cement and Mortar Mixers			2
Pavers			1
Paving Equipment			2
Rollers			2
Tractors/Loaders/Backhoes			1
This equipment list is based upon equipment inventory within CalEEMod.			

3.3 Operational Emissions

Once construction is completed the proposed project would generate emissions from daily operations which would include sources such as Area, Energy, Mobile, Waste and Water uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as onsite natural gas use. Also, upon discussions with the applicants, the proposed multi-family units would have natural gas hearth options installed. The Operational model is also shown in ***Attachment A*** at the end of this report.

The Project traffic engineer estimated that the multi-family development would generate 6 trips per unit. Therefore, the 156-unit project would generate 936 daily trips (Urban Systems Associates, INC, 2022). These traffic numbers were utilized within the CalEEMod analysis.

Furthermore, CalEEMod includes landscaping and consumer product assumptions which would apply to this project. Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the population associated with the residential development. Default emission factors were utilized within the CalEEMod.

3.4 Odor Impacts (Onsite)

Odor impacts would not significantly change under the proposed residential project since residential projects typically do not generate offensive odors. Given this, no significant odor impacts would be associated with the proposed Project.

4.0 FINDINGS

4.1 Construction Findings

The estimated construction emissions are shown in Table 4.1 below. Based on the estimated emissions, the demolition and construction of the multi-family development would generate less than significant air quality impacts. In addition, the air quality emissions assume all diesel equipment are Tier 4 and have DPF installed.

Table 4.1: Hope apartment Construction Emissions Summary

Year	ROG	NO_x	CO	SO_2	PM_{10} (Dust)	PM_{10} (Exhaust)	PM_{10} (Total)	$PM_{2.5}$ (Dust)	$PM_{2.5}$ (Exhaust)	$PM_{2.5}$ (Total)
2022	2.71	27.20	20.44	0.05	19.80	1.23	21.04	10.14	1.13	11.27
2023	51.74	15.45	22.62	0.05	1.88	0.60	2.47	0.50	0.56	1.07
Significance Threshold (lb/day)	**75**	**250**	**550**	**250**	**-**	**-**	**100**	**-**	**-**	**55**
Exceeds Screening Threshold	No	No	No	No	-	-	No	-	-	No

Given these findings, no direct construction impacts are expected. Mitigation measures for criteria pollutants and fugitive dust from construction is not required. It should be noted that the grading contractor will be required to follow BMPs for grading and comply with all SDAPCD rules and regulations.

4.2 Health Risk

Based upon the air quality modeling, worst-case onsite PM_{10} from onsite construction exhaust would cumulatively produce 0.00166 tons over the construction duration (399 calendar days) or an average of .0000436 grams/second. The average emission rate over the grading area is $3.55x10^{-9} g/m^2/s$, which was calculated as follows:

$$\frac{0.000436}{3.04 acres * 4{,}046 \frac{meters^2}{acre}} = 3.55 * 10^{-9} \frac{\frac{grams}{meters^2}}{sec\ o\ nd}$$

Utilizing the AERSCREEN dispersion model, we find that the peak maximum 1-hr concentration is 0.098 $\mu g/m^3$ during the worst-case construction period. Converting the peak 1-hr

concentration to an annual concentration reduces the concentration to 0.00784 µg/m^3. Therefore, utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk 1.52 at the point of maximum exposure 75 meters away which is less than 10 in one million people exposed.

4.3 Operational Findings

The CALEEMOD 2020.4.0 Model was run for both the winter and summer scenarios using default trip distances as well as assumptions discussed in 3.3 of this report. The estimated emissions as calculated by CalEEMod is shown in Table 4.2 below. Based upon these calculations, the proposed project would not generate operational air quality impacts.

Table 4.2: Daily Pollutant Generation

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Summer Scenario						
Area Source Emission Estimates Mitigated (Lb/Day)	4.32	0.15	12.89	0.00	0.07	0.07
Energy Emission Estimates Mitigated (Lb/Day)	0.03	0.29	0.12	0.00	0.02	0.02
Mobile Emission Estimates Mitigated (Lb/Day)	2.60	2.58	23.27	0.05	5.66	1.53
Total (Lb/Day)	**6.95**	**3.02**	**36.28**	**0.05**	**5.76**	**1.63**
Screening Level Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Winter Scenario						
Area Source Emission Estimates (Lb/Day)	4.32	0.15	12.89	0.00	0.07	0.07
Energy Emission Estimates (Lb/Day)	0.03	0.29	0.12	0.00	0.02	0.02
Mobile Emission Estimates (Lb/Day)	2.53	2.80	23.88	0.05	5.66	1.53
Total (Lb/Day)	**6.88**	**3.23**	**36.89**	**0.05**	**5.76**	**1.63**
Screening Level Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CalEEMod						

4.4 Odor Impact Findings

Odor impacts from construction operations would be considered short term and would not be considered an impact. Also, since the proposed Project is a multi-family residential development odor impacts from the Project operations would be less than significant.

4.5 Summary of Findings

Based upon findings in this report, a less than significant construction impact would be expected. It should be noted that the follow design features were assumed and would be a condition to the project.

1. Multi-Family residential units would not have hearth units.
2. Tier 4 or diesel construction equipment would be required during construction which would have diesel particulate filters installed.

5.0 REFERENCES

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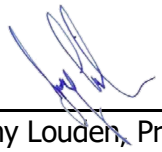
6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed residential development. This report was prepared utilizing the latest emission rates and reduction methodologies.



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Date November 9, 2022

ATTACHMENT A

CALEEMOD 2020.4.0 – Summer, Winter, Annual

Hope Development - San Diego County, Summer

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

Hope Development

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	315.00	Space	1.00	126,000.00	0
Apartments High Rise	156.00	Dwelling Unit	2.04	156,000.00	446

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
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 - Project is 3.04 acres

Construction Phase - Proposed Schedule

Off-road Equipment - CE

Demolition -

Grading - Balanced

Architectural Coating - Rule 67 Compliant Paint

Vehicle Trips - Per Traffic Study

Woodstoves - no hearth units installed

Area Coating - Rule 67 Compliant Paints

Energy Use -

Hope Development - San Diego County, Summer

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

Construction Off-road Equipment Mitigation - Tier 4 Construction Equipment will be utilized

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	18.00	40.00
tblFireplaces	NumberGas	85.80	0.00

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

tblFireplaces	NumberNoFireplace	15.60	156.00
tblFireplaces	NumberWood	54.60	0.00
tblLandUse	LotAcreage	2.84	1.00
tblLandUse	LotAcreage	2.52	2.04
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblVehicleTrips	ST_TR	4.53	6.00
tblVehicleTrips	SU_TR	3.59	6.00
tblVehicleTrips	WD_TR	4.45	6.00
tblWoodstoves	NumberCatalytic	7.80	0.00
tblWoodstoves	NumberNoncatalytic	7.80	0.00

2.0 Emissions Summary

Hope Development - San Diego County, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7071	27.2035	20.4355	0.0460	19.8049	1.2301	21.0350	10.1417	1.1317	11.2734	0.0000	4,554.1736	4,554.1736	1.1960	0.1446	4,613.7391
2025	51.7413	15.4489	22.6195	0.0506	1.8771	0.5967	2.4739	0.5036	0.5644	1.0680	0.0000	5,024.8872	5,024.8872	0.6749	0.1458	5,085.2213
Maximum	**51.7413**	**27.2035**	**22.6195**	**0.0506**	**19.8049**	**1.2301**	**21.0350**	**10.1417**	**1.1317**	**11.2734**	**0.0000**	**5,024.8872**	**5,024.8872**	**1.1960**	**0.1458**	**5,085.2213**

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					
2024	0.9999	12.7395	23.3648	0.0460	19.8049	0.0294	19.8149	10.1417	0.0284	10.1517	0.0000	4,554.1736	4,554.1736	1.1960	0.1446	4,613.7391
2025	50.7910	13.8057	24.4319	0.0506	1.8771	0.0310	1.9081	0.5036	0.0299	0.5335	0.0000	5,024.8872	5,024.8872	0.6749	0.1458	5,085.2213
Maximum	**50.7910**	**13.8057**	**24.4319**	**0.0506**	**19.8049**	**0.0310**	**19.8149**	**10.1417**	**0.0299**	**10.1517**	**0.0000**	**5,024.8872**	**5,024.8872**	**1.1960**	**0.1458**	**5,085.2213**

Hope Development - San Diego County, 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	N20	CO2e
Percent Reduction	4.88	37.76	-11.01	0.00	0.00	96.70	7.60	0.00	96.56	13.42	0.00	0.00	0.00	0.00	0.00	0.00

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	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Energy	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
Mobile	2.5953	2.5835	23.2697	0.0517	5.6259	0.0388	5.6646	1.4986	0.0362	1.5348		5,399.9499	5,399.9499	0.3492	0.2207	5,474.4369
Total	**6.9454**	**3.0185**	**36.2817**	**0.0542**	**5.6259**	**0.1334**	**5.7593**	**1.4986**	**0.1308**	**1.6294**	**0.0000**	**5,789.0476**	**5,789.0476**	**0.3786**	**0.2274**	**5,866.2679**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Energy	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
Mobile	2.5953	2.5835	23.2697	0.0517	5.6259	0.0388	5.6646	1.4986	0.0362	1.5348		5,399.9499	5,399.9499	0.3492	0.2207	5,474.4369
Total	**6.9454**	**3.0185**	**36.2817**	**0.0542**	**5.6259**	**0.1334**	**5.7593**	**1.4986**	**0.1308**	**1.6294**	**0.0000**	**5,789.0476**	**5,789.0476**	**0.3786**	**0.2274**	**5,866.2679**

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	7/5/2024	5	25	
2	Site Preparation	Site Preparation	7/6/2024	7/12/2024	5	5	
3	Grading	Grading	7/13/2024	7/24/2024	5	8	
4	Building Construction	Building Construction	7/25/2024	6/11/2025	5	230	
5	Architectural Coating	Architectural Coating	4/17/2025	6/11/2025	5	40	
6	Paving	Paving	6/12/2025	7/7/2025	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1

Residential Indoor: 315,900; Residential Outdoor: 105,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,560 (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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

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

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	141.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Hope Development - San Diego County, Summer

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

Use DPF for Construction Equipment

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2358	0.0000	1.2358	0.1872	0.0000	0.1872			0.0000			0.0000
Off-Road	2.0635	19.4753	16.4423	0.0337		0.8911	0.8911		0.8286	0.8286		3,247.1574	3,247.1574	0.8867		3,269.3242
Total	**2.0635**	**19.4753**	**16.4423**	**0.0337**	**1.2358**	**0.8911**	**2.1269**	**0.1872**	**0.8286**	**1.0158**		**3,247.1574**	**3,247.1574**	**0.8867**		**3,269.3242**

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

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0126	0.7314	0.2055	3.3100e-003	0.0987	6.3000e-003	0.1050	0.0270	6.0300e-003	0.0331		366.3948	366.3948	0.0194	0.0583	384.2554
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0334	0.0199	0.2923	9.1000e-004	0.1068	5.5000e-004	0.1073	0.0283	5.0000e-004	0.0288		94.1405	94.1405	2.3500e-003	2.2200e-003	94.8615
Total	**0.0460**	**0.7512**	**0.4978**	**4.2200e-003**	**0.2054**	**6.8500e-003**	**0.2123**	**0.0554**	**6.5300e-003**	**0.0619**		**460.5354**	**460.5354**	**0.0217**	**0.0605**	**479.1168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					1.2358	0.0000	1.2358	0.1872	0.0000	0.1872			0.0000			0.0000
Off-Road	0.5206	11.2809	20.7559	0.0337		7.9700e-003	7.9700e-003		7.9700e-003	7.9700e-003	0.0000	3,247.1574	3,247.1574	0.8867		3,269.3242
Total	**0.5206**	**11.2809**	**20.7559**	**0.0337**	**1.2358**	**7.9700e-003**	**1.2438**	**0.1872**	**7.9700e-003**	**0.1951**	**0.0000**	**3,247.1574**	**3,247.1574**	**0.8867**		**3,269.3242**

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

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0126	0.7314	0.2055	3.3100e-003	0.0987	6.3000e-003	0.1050	0.0270	6.0300e-003	0.0331		366.3948	366.3948	0.0194	0.0583	384.2554
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0334	0.0199	0.2923	9.1000e-004	0.1068	5.5000e-004	0.1073	0.0283	5.0000e-004	0.0288		94.1405	94.1405	2.3500e-003	2.2200e-003	94.8615
Total	**0.0460**	**0.7512**	**0.4978**	**4.2200e-003**	**0.2054**	**6.8500e-003**	**0.2123**	**0.0554**	**6.5300e-003**	**0.0619**		**460.5354**	**460.5354**	**0.0217**	**0.0605**	**479.1168**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Hope Development - San Diego County, Summer

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

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0462	0.0275	0.4048	1.2600e-003	0.1479	7.6000e-004	0.1486	0.0392	7.0000e-004	0.0399		130.3484	130.3484	3.2600e-003	3.0800e-003	131.3466
Total	**0.0462**	**0.0275**	**0.4048**	**1.2600e-003**	**0.1479**	**7.6000e-004**	**0.1486**	**0.0392**	**7.0000e-004**	**0.0399**		**130.3484**	**130.3484**	**3.2600e-003**	**3.0800e-003**	**131.3466**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.6967**	**12.1620**	**22.9600**	**0.0381**	**19.6570**	**9.3100e-003**	**19.6663**	**10.1025**	**9.3100e-003**	**10.1118**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

Hope Development - San Diego County, Summer

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

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0462	0.0275	0.4048	1.2600e-003	0.1479	7.6000e-004	0.1486	0.0392	7.0000e-004	0.0399		130.3484	130.3484	3.2600e-003	3.0800e-003	131.3466
Total	**0.0462**	**0.0275**	**0.4048**	**1.2600e-003**	**0.1479**	**7.6000e-004**	**0.1486**	**0.0392**	**7.0000e-004**	**0.0399**		**130.3484**	**130.3484**	**3.2600e-003**	**3.0800e-003**	**131.3466**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

Hope Development - San Diego County, Summer

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

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0385	0.0229	0.3373	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		108.6237	108.6237	2.7100e-003	2.5600e-003	109.4555
Total	**0.0385**	**0.0229**	**0.3373**	**1.0500e-003**	**0.1232**	**6.3000e-004**	**0.1239**	**0.0327**	**5.8000e-004**	**0.0333**		**108.6237**	**108.6237**	**2.7100e-003**	**2.5600e-003**	**109.4555**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5200	10.3327	18.9906	0.0297		7.2600e-003	7.2600e-003		7.2600e-003	7.2600e-003	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**0.5200**	**10.3327**	**18.9906**	**0.0297**	**7.0826**	**7.2600e-003**	**7.0899**	**3.4247**	**7.2600e-003**	**3.4320**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

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

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0385	0.0229	0.3373	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		108.6237	108.6237	2.7100e-003	2.5600e-003	109.4555
Total	**0.0385**	**0.0229**	**0.3373**	**1.0500e-003**	**0.1232**	**6.3000e-004**	**0.1239**	**0.0327**	**5.8000e-004**	**0.0333**		**108.6237**	**108.6237**	**2.7100e-003**	**2.5600e-003**	**109.4555**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

Hope Development - San Diego County, Summer

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

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0426	1.5753	0.5582	7.4300e-003	0.2506	9.7100e-003	0.2603	0.0721	9.2900e-003	0.0814		803.6144	803.6144	0.0254	0.1164	838.9206
Worker	0.4238	0.2521	3.7104	0.0116	1.3554	6.9500e-003	1.3624	0.3595	6.4000e-003	0.3659		1,194.8603	1,194.8603	0.0299	0.0282	1,204.0108
Total	**0.4664**	**1.8274**	**4.2686**	**0.0190**	**1.6060**	**0.0167**	**1.6227**	**0.4317**	**0.0157**	**0.4474**		**1,998.4747**	**1,998.4747**	**0.0552**	**0.1446**	**2,042.9314**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5335	10.9122	17.8738	0.0270		0.0127	0.0127		0.0127	0.0127	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.5335**	**10.9122**	**17.8738**	**0.0270**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0426	1.5753	0.5582	7.4300e-003	0.2506	9.7100e-003	0.2603	0.0721	9.2900e-003	0.0814		803.6144	803.6144	0.0254	0.1164	838.9206
Worker	0.4238	0.2521	3.7104	0.0116	1.3554	6.9500e-003	1.3624	0.3595	6.4000e-003	0.3659		1,194.8603	1,194.8603	0.0299	0.0282	1,204.0108
Total	**0.4664**	**1.8274**	**4.2686**	**0.0190**	**1.6060**	**0.0167**	**1.6227**	**0.4317**	**0.0157**	**0.4474**		**1,998.4747**	**1,998.4747**	**0.0552**	**0.1446**	**2,042.9314**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0413	1.5598	0.5489	7.2800e-003	0.2506	9.6800e-003	0.2603	0.0721	9.2600e-003	0.0814		788.2844	788.2844	0.0260	0.1141	822.9281
Worker	0.3993	0.2283	3.4807	0.0112	1.3554	6.6500e-003	1.3621	0.3595	6.1300e-003	0.3657		1,165.5670	1,165.5670	0.0272	0.0265	1,174.1360
Total	**0.4406**	**1.7881**	**4.0296**	**0.0185**	**1.6060**	**0.0163**	**1.6224**	**0.4317**	**0.0154**	**0.4471**		**1,953.8514**	**1,953.8514**	**0.0532**	**0.1405**	**1,997.0641**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5335	10.9122	17.8738	0.0270		0.0127	0.0127		0.0127	0.0127	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.5335**	**10.9122**	**17.8738**	**0.0270**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0413	1.5598	0.5489	7.2800e-003	0.2506	9.6800e-003	0.2603	0.0721	9.2600e-003	0.0814		788.2844	788.2844	0.0260	0.1141	822.9281
Worker	0.3993	0.2283	3.4807	0.0112	1.3554	6.6500e-003	1.3621	0.3595	6.1300e-003	0.3657		1,165.5670	1,165.5670	0.0272	0.0265	1,174.1360
Total	**0.4406**	**1.7881**	**4.0296**	**0.0185**	**1.6060**	**0.0163**	**1.6224**	**0.4317**	**0.0154**	**0.4471**		**1,953.8514**	**1,953.8514**	**0.0532**	**0.1405**	**1,997.0641**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.6826					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**49.8534**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0799	0.0457	0.6962	2.2400e-003	0.2711	1.3300e-003	0.2724	0.0719	1.2300e-003	0.0731		233.1134	233.1134	5.4400e-003	5.2900e-003	234.8272
Total	**0.0799**	**0.0457**	**0.6962**	**2.2400e-003**	**0.2711**	**1.3300e-003**	**0.2724**	**0.0719**	**1.2300e-003**	**0.0731**		**233.1134**	**233.1134**	**5.4400e-003**	**5.2900e-003**	**234.8272**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	49.6826					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**49.7370**	**1.0598**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0799	0.0457	0.6962	2.2400e-003	0.2711	1.3300e-003	0.2724	0.0719	1.2300e-003	0.0731		233.1134	233.1134	5.4400e-003	5.2900e-003	234.8272
Total	**0.0799**	**0.0457**	**0.6962**	**2.2400e-003**	**0.2711**	**1.3300e-003**	**0.2724**	**0.0719**	**1.2300e-003**	**0.0731**		**233.1134**	**233.1134**	**5.4400e-003**	**5.2900e-003**	**234.8272**

3.7 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9653**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

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

3.7 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0484	0.0277	0.4219	1.3600e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		141.2809	141.2809	3.3000e-003	3.2100e-003	142.3195
Total	**0.0484**	**0.0277**	**0.4219**	**1.3600e-003**	**0.1643**	**8.1000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**141.2809**	**141.2809**	**3.3000e-003**	**3.2100e-003**	**142.3195**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2913	7.8490	13.5323	0.0189		4.3900e-003	4.3900e-003		4.3900e-003	4.3900e-003	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4369**	**7.8490**	**13.5323**	**0.0189**		**4.3900e-003**	**4.3900e-003**		**4.3900e-003**	**4.3900e-003**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

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

3.7 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0484	0.0277	0.4219	1.3600e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		141.2809	141.2809	3.3000e-003	3.2100e-003	142.3195
Total	**0.0484**	**0.0277**	**0.4219**	**1.3600e-003**	**0.1643**	**8.1000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**141.2809**	**141.2809**	**3.3000e-003**	**3.2100e-003**	**142.3195**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	lb/day										lb/day					
Mitigated	2.5953	2.5835	23.2697	0.0517	5.6259	0.0388	5.6646	1.4986	0.0362	1.5348		5,399.9499	5,399.9499	0.3492	0.2207	5,474.4369
Unmitigated	2.5953	2.5835	23.2697	0.0517	5.6259	0.0388	5.6646	1.4986	0.0362	1.5348		5,399.9499	5,399.9499	0.3492	0.2207	5,474.4369

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	936.00	936.00	936.00	2,672,564	2,672,564
Parking Lot	0.00	0.00	0.00		
Total	936.00	936.00	936.00	2,672,564	2,672,564

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 High 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 High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

Hope Development - San Diego County, Summer

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	lb/day										lb/day					
NaturalGas Mitigated	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
NaturalGas Unmitigated	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287

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 High Rise	3109.76	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
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		**0.0335**	**0.2866**	**0.1220**	**1.8300e-003**		**0.0232**	**0.0232**		**0.0232**	**0.0232**		**365.8546**	**365.8546**	**7.0100e-003**	**6.7100e-003**	**368.0287**

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

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 High Rise	3.10976	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
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		**0.0335**	**0.2866**	**0.1220**	**1.8300e-003**		**0.0232**	**0.0232**		**0.0232**	**0.0232**		**365.8546**	**365.8546**	**7.0100e-003**	**6.7100e-003**	**368.0287**

6.0 Area Detail

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	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Unmitigated	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024

Hope Development - San Diego County, Summer

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	0.5445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3830					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	0.3890	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715		23.2431	23.2431	0.0224		23.8024
Total	**4.3165**	**0.1484**	**12.8901**	**6.8000e-004**		**0.0715**	**0.0715**		**0.0715**	**0.0715**	**0.0000**	**23.2431**	**23.2431**	**0.0224**	**0.0000**	**23.8024**

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	0.5445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3830					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	0.3890	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715		23.2431	23.2431	0.0224		23.8024
Total	**4.3165**	**0.1484**	**12.8901**	**6.8000e-004**		**0.0715**	**0.0715**		**0.0715**	**0.0715**	**0.0000**	**23.2431**	**23.2431**	**0.0224**	**0.0000**	**23.8024**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Hope Development - San Diego County, Winter

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

Hope Development

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	315.00	Space	1.00	126,000.00	0
Apartments High Rise	156.00	Dwelling Unit	2.04	156,000.00	446

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
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 - Project is 3.04 acres

Construction Phase - Proposed Schedule

Off-road Equipment - CE

Demolition -

Grading - Balanced

Architectural Coating - Rule 67 Compliant Paint

Vehicle Trips - Per Traffic Study

Woodstoves - no hearth units installed

Area Coating - Rule 67 Compliant Paints

Energy Use -

Hope Development - San Diego County, Winter

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

Construction Off-road Equipment Mitigation - Tier 4 Construction Equipment will be utilized

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	18.00	40.00
tblFireplaces	NumberGas	85.80	0.00

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

tblFireplaces	NumberNoFireplace	15.60	156.00
tblFireplaces	NumberWood	54.60	0.00
tblLandUse	LotAcreage	2.84	1.00
tblLandUse	LotAcreage	2.52	2.04
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblVehicleTrips	ST_TR	4.53	6.00
tblVehicleTrips	SU_TR	3.59	6.00
tblVehicleTrips	WD_TR	4.45	6.00
tblWoodstoves	NumberCatalytic	7.80	0.00
tblWoodstoves	NumberNoncatalytic	7.80	0.00

2.0 Emissions Summary

Hope Development - San Diego County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	2.7112	27.2069	20.2749	0.0453	19.8049	1.2301	21.0350	10.1417	1.1317	11.2734	0.0000	4,489.8158	4,489.8158	1.1963	0.1471	4,550.1921
2025	51.7828	15.5490	22.4426	0.0499	1.8771	0.5968	2.4739	0.5036	0.5644	1.0680	0.0000	4,949.5025	4,949.5025	0.6771	0.1487	5,010.7363
Maximum	**51.7828**	**27.2069**	**22.4426**	**0.0499**	**19.8049**	**1.2301**	**21.0350**	**10.1417**	**1.1317**	**11.2734**	**0.0000**	**4,949.5025**	**4,949.5025**	**1.1963**	**0.1487**	**5,010.7363**

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					
2024	1.0355	12.8374	23.3454	0.0453	19.8049	0.0294	19.8149	10.1417	0.0284	10.1517	0.0000	4,489.8158	4,489.8158	1.1963	0.1471	4,550.1921
2025	50.8325	13.9058	24.2550	0.0499	1.8771	0.0310	1.9081	0.5036	0.0299	0.5335	0.0000	4,949.5025	4,949.5025	0.6771	0.1487	5,010.7363
Maximum	**50.8325**	**13.9058**	**24.2550**	**0.0499**	**19.8049**	**0.0310**	**19.8149**	**10.1417**	**0.0299**	**10.1517**	**0.0000**	**4,949.5025**	**4,949.5025**	**1.1963**	**0.1487**	**5,010.7363**

Hope Development - San Diego County, 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	N20	CO2e
Percent Reduction	4.82	37.45	-11.43	0.00	0.00	96.69	7.60	0.00	96.56	13.42	0.00	0.00	0.00	0.00	0.00	0.00

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	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Energy	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
Mobile	2.5341	2.7987	23.8765	0.0495	5.6259	0.0388	5.6647	1.4986	0.0362	1.5348		5,165.2967	5,165.2967	0.3688	0.2323	5,243.7368
Total	**6.8841**	**3.2337**	**36.8885**	**0.0520**	**5.6259**	**0.1334**	**5.7593**	**1.4986**	**0.1308**	**1.6294**	**0.0000**	**5,554.3943**	**5,554.3943**	**0.3982**	**0.2390**	**5,635.5678**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Energy	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
Mobile	2.5341	2.7987	23.8765	0.0495	5.6259	0.0388	5.6647	1.4986	0.0362	1.5348		5,165.2967	5,165.2967	0.3688	0.2323	5,243.7368
Total	**6.8841**	**3.2337**	**36.8885**	**0.0520**	**5.6259**	**0.1334**	**5.7593**	**1.4986**	**0.1308**	**1.6294**	**0.0000**	**5,554.3943**	**5,554.3943**	**0.3982**	**0.2390**	**5,635.5678**

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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	7/5/2024	5	25	
2	Site Preparation	Site Preparation	7/6/2024	7/12/2024	5	5	
3	Grading	Grading	7/13/2024	7/24/2024	5	8	
4	Building Construction	Building Construction	7/25/2024	6/11/2025	5	230	
5	Architectural Coating	Architectural Coating	4/17/2025	6/11/2025	5	40	
6	Paving	Paving	6/12/2025	7/7/2025	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1

Residential Indoor: 315,900; Residential Outdoor: 105,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,560 (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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

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

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	141.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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

Use DPF for Construction Equipment

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2358	0.0000	1.2358	0.1872	0.0000	0.1872			0.0000			0.0000
Off-Road	2.0635	19.4753	16.4423	0.0337		0.8911	0.8911		0.8286	0.8286		3,247.1574	3,247.1574	0.8867		3,269.3242
Total	**2.0635**	**19.4753**	**16.4423**	**0.0337**	**1.2358**	**0.8911**	**2.1269**	**0.1872**	**0.8286**	**1.0158**		**3,247.1574**	**3,247.1574**	**0.8867**		**3,269.3242**

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

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0119	0.7609	0.2080	3.3100e-003	0.0987	6.3100e-003	0.1050	0.0270	6.0400e-003	0.0331		366.7573	366.7573	0.0193	0.0584	384.6346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0363	0.0223	0.2783	8.6000e-004	0.1068	5.5000e-004	0.1073	0.0283	5.0000e-004	0.0288		88.9773	88.9773	2.5100e-003	2.4000e-003	89.7560
Total	**0.0482**	**0.7833**	**0.4863**	**4.1700e-003**	**0.2054**	**6.8600e-003**	**0.2123**	**0.0554**	**6.5400e-003**	**0.0619**		**455.7346**	**455.7346**	**0.0218**	**0.0608**	**474.3906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					1.2358	0.0000	1.2358	0.1872	0.0000	0.1872			0.0000			0.0000
Off-Road	0.5206	11.2809	20.7559	0.0337		7.9700e-003	7.9700e-003		7.9700e-003	7.9700e-003	0.0000	3,247.1574	3,247.1574	0.8867		3,269.3242
Total	**0.5206**	**11.2809**	**20.7559**	**0.0337**	**1.2358**	**7.9700e-003**	**1.2438**	**0.1872**	**7.9700e-003**	**0.1951**	**0.0000**	**3,247.1574**	**3,247.1574**	**0.8867**		**3,269.3242**

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

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0119	0.7609	0.2080	3.3100e-003	0.0987	6.3100e-003	0.1050	0.0270	6.0400e-003	0.0331		366.7573	366.7573	0.0193	0.0584	384.6346
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0363	0.0223	0.2783	8.6000e-004	0.1068	5.5000e-004	0.1073	0.0283	5.0000e-004	0.0288		88.9773	88.9773	2.5100e-003	2.4000e-003	89.7560
Total	**0.0482**	**0.7833**	**0.4863**	**4.1700e-003**	**0.2054**	**6.8600e-003**	**0.2123**	**0.0554**	**6.5400e-003**	**0.0619**		**455.7346**	**455.7346**	**0.0218**	**0.0608**	**474.3906**

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**19.6570**	**1.2294**	**20.8864**	**10.1025**	**1.1310**	**11.2335**		**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0503	0.0309	0.3854	1.1900e-003	0.1479	7.6000e-004	0.1486	0.0392	7.0000e-004	0.0399		123.1993	123.1993	3.4800e-003	3.3300e-003	124.2776
Total	**0.0503**	**0.0309**	**0.3854**	**1.1900e-003**	**0.1479**	**7.6000e-004**	**0.1486**	**0.0392**	**7.0000e-004**	**0.0399**		**123.1993**	**123.1993**	**3.4800e-003**	**3.3300e-003**	**124.2776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	0.6967	12.1620	22.9600	0.0381		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	**0.6967**	**12.1620**	**22.9600**	**0.0381**	**19.6570**	**9.3100e-003**	**19.6663**	**10.1025**	**9.3100e-003**	**10.1118**	**0.0000**	**3,688.0100**	**3,688.0100**	**1.1928**		**3,717.8294**

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

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0503	0.0309	0.3854	1.1900e-003	0.1479	7.6000e-004	0.1486	0.0392	7.0000e-004	0.0399		123.1993	123.1993	3.4800e-003	3.3300e-003	124.2776
Total	**0.0503**	**0.0309**	**0.3854**	**1.1900e-003**	**0.1479**	**7.6000e-004**	**0.1486**	**0.0392**	**7.0000e-004**	**0.0399**		**123.1993**	**123.1993**	**3.4800e-003**	**3.3300e-003**	**124.2776**

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**1.6617**	**17.0310**	**14.7594**	**0.0297**	**7.0826**	**0.7244**	**7.8070**	**3.4247**	**0.6665**	**4.0912**		**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

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

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0419	0.0258	0.3212	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		102.6661	102.6661	2.9000e-003	2.7700e-003	103.5647
Total	**0.0419**	**0.0258**	**0.3212**	**1.0000e-003**	**0.1232**	**6.3000e-004**	**0.1239**	**0.0327**	**5.8000e-004**	**0.0333**		**102.6661**	**102.6661**	**2.9000e-003**	**2.7700e-003**	**103.5647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5200	10.3327	18.9906	0.0297		7.2600e-003	7.2600e-003		7.2600e-003	7.2600e-003	0.0000	2,873.0541	2,873.0541	0.9292		2,896.2842
Total	**0.5200**	**10.3327**	**18.9906**	**0.0297**	**7.0826**	**7.2600e-003**	**7.0899**	**3.4247**	**7.2600e-003**	**3.4320**	**0.0000**	**2,873.0541**	**2,873.0541**	**0.9292**		**2,896.2842**

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

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0419	0.0258	0.3212	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333		102.6661	102.6661	2.9000e-003	2.7700e-003	103.5647
Total	**0.0419**	**0.0258**	**0.3212**	**1.0000e-003**	**0.1232**	**6.3000e-004**	**0.1239**	**0.0327**	**5.8000e-004**	**0.0333**		**102.6661**	**102.6661**	**2.9000e-003**	**2.7700e-003**	**103.5647**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0413	1.6417	0.5754	7.4400e-003	0.2506	9.7600e-003	0.2604	0.0721	9.3300e-003	0.0815		804.7895	804.7895	0.0252	0.1166	840.1732
Worker	0.4607	0.2835	3.5327	0.0110	1.3554	6.9500e-003	1.3624	0.3595	6.4000e-003	0.3659		1,129.3273	1,129.3273	0.0319	0.0305	1,139.2112
Total	**0.5020**	**1.9252**	**4.1081**	**0.0184**	**1.6060**	**0.0167**	**1.6227**	**0.4317**	**0.0157**	**0.4474**		**1,934.1169**	**1,934.1169**	**0.0571**	**0.1471**	**1,979.3844**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5335	10.9122	17.8738	0.0270		0.0127	0.0127		0.0127	0.0127	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**0.5335**	**10.9122**	**17.8738**	**0.0270**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0413	1.6417	0.5754	7.4400e-003	0.2506	9.7600e-003	0.2604	0.0721	9.3300e-003	0.0815		804.7895	804.7895	0.0252	0.1166	840.1732
Worker	0.4607	0.2835	3.5327	0.0110	1.3554	6.9500e-003	1.3624	0.3595	6.4000e-003	0.3659		1,129.3273	1,129.3273	0.0319	0.0305	1,139.2112
Total	**0.5020**	**1.9252**	**4.1081**	**0.0184**	**1.6060**	**0.0167**	**1.6227**	**0.4317**	**0.0157**	**0.4474**		**1,934.1169**	**1,934.1169**	**0.0571**	**0.1471**	**1,979.3844**

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

3.5 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0399	1.6258	0.5659	7.2900e-003	0.2506	9.7200e-003	0.2603	0.0721	9.3000e-003	0.0814		789.4646	789.4646	0.0259	0.1143	824.1839
Worker	0.4351	0.2567	3.3191	0.0106	1.3554	6.6500e-003	1.3621	0.3595	6.1300e-003	0.3657		1,101.7629	1,101.7629	0.0291	0.0286	1,111.0188
Total	**0.4750**	**1.8825**	**3.8850**	**0.0179**	**1.6060**	**0.0164**	**1.6224**	**0.4317**	**0.0154**	**0.4471**		**1,891.2275**	**1,891.2275**	**0.0550**	**0.1430**	**1,935.2026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5335	10.9122	17.8738	0.0270		0.0127	0.0127		0.0127	0.0127	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**0.5335**	**10.9122**	**17.8738**	**0.0270**		**0.0127**	**0.0127**		**0.0127**	**0.0127**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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

3.5 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0399	1.6258	0.5659	7.2900e-003	0.2506	9.7200e-003	0.2603	0.0721	9.3000e-003	0.0814		789.4646	789.4646	0.0259	0.1143	824.1839
Worker	0.4351	0.2567	3.3191	0.0106	1.3554	6.6500e-003	1.3621	0.3595	6.1300e-003	0.3657		1,101.7629	1,101.7629	0.0291	0.0286	1,111.0188
Total	**0.4750**	**1.8825**	**3.8850**	**0.0179**	**1.6060**	**0.0164**	**1.6224**	**0.4317**	**0.0154**	**0.4471**		**1,891.2275**	**1,891.2275**	**0.0550**	**0.1430**	**1,935.2026**

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	49.6826					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**49.8534**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0870	0.0513	0.6638	2.1200e-003	0.2711	1.3300e-003	0.2724	0.0719	1.2300e-003	0.0731		220.3526	220.3526	5.8200e-003	5.7200e-003	222.2038
Total	**0.0870**	**0.0513**	**0.6638**	**2.1200e-003**	**0.2711**	**1.3300e-003**	**0.2724**	**0.0719**	**1.2300e-003**	**0.0731**		**220.3526**	**220.3526**	**5.8200e-003**	**5.7200e-003**	**222.2038**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	49.6826					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0545	1.0598	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**49.7370**	**1.0598**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0870	0.0513	0.6638	2.1200e-003	0.2711	1.3300e-003	0.2724	0.0719	1.2300e-003	0.0731		220.3526	220.3526	5.8200e-003	5.7200e-003	222.2038
Total	**0.0870**	**0.0513**	**0.6638**	**2.1200e-003**	**0.2711**	**1.3300e-003**	**0.2724**	**0.0719**	**1.2300e-003**	**0.0731**		**220.3526**	**220.3526**	**5.8200e-003**	**5.7200e-003**	**222.2038**

3.7 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8197	7.5321	12.1778	0.0189		0.3524	0.3524		0.3259	0.3259		1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9653**	**7.5321**	**12.1778**	**0.0189**		**0.3524**	**0.3524**		**0.3259**	**0.3259**		**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

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

3.7 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0311	0.4023	1.2800e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		133.5470	133.5470	3.5300e-003	3.4700e-003	134.6689
Total	**0.0527**	**0.0311**	**0.4023**	**1.2800e-003**	**0.1643**	**8.1000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**133.5470**	**133.5470**	**3.5300e-003**	**3.4700e-003**	**134.6689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2913	7.8490	13.5323	0.0189		4.3900e-003	4.3900e-003		4.3900e-003	4.3900e-003	0.0000	1,805.3926	1,805.3926	0.5673		1,819.5741
Paving	0.1456					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4369**	**7.8490**	**13.5323**	**0.0189**		**4.3900e-003**	**4.3900e-003**		**4.3900e-003**	**4.3900e-003**	**0.0000**	**1,805.3926**	**1,805.3926**	**0.5673**		**1,819.5741**

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

3.7 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0311	0.4023	1.2800e-003	0.1643	8.1000e-004	0.1651	0.0436	7.4000e-004	0.0443		133.5470	133.5470	3.5300e-003	3.4700e-003	134.6689
Total	**0.0527**	**0.0311**	**0.4023**	**1.2800e-003**	**0.1643**	**8.1000e-004**	**0.1651**	**0.0436**	**7.4000e-004**	**0.0443**		**133.5470**	**133.5470**	**3.5300e-003**	**3.4700e-003**	**134.6689**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	lb/day										lb/day					
Mitigated	2.5341	2.7987	23.8765	0.0495	5.6259	0.0388	5.6647	1.4986	0.0362	1.5348		5,165.2967	5,165.2967	0.3688	0.2323	5,243.7368
Unmitigated	2.5341	2.7987	23.8765	0.0495	5.6259	0.0388	5.6647	1.4986	0.0362	1.5348		5,165.2967	5,165.2967	0.3688	0.2323	5,243.7368

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	936.00	936.00	936.00	2,672,564	2,672,564
Parking Lot	0.00	0.00	0.00		
Total	936.00	936.00	936.00	2,672,564	2,672,564

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 High 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 High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

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	lb/day										lb/day					
NaturalGas Mitigated	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
NaturalGas Unmitigated	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287

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 High Rise	3109.76	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
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		**0.0335**	**0.2866**	**0.1220**	**1.8300e-003**		**0.0232**	**0.0232**		**0.0232**	**0.0232**		**365.8546**	**365.8546**	**7.0100e-003**	**6.7100e-003**	**368.0287**

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

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 High Rise	3.10976	0.0335	0.2866	0.1220	1.8300e-003		0.0232	0.0232		0.0232	0.0232		365.8546	365.8546	7.0100e-003	6.7100e-003	368.0287
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		**0.0335**	**0.2866**	**0.1220**	**1.8300e-003**		**0.0232**	**0.0232**		**0.0232**	**0.0232**		**365.8546**	**365.8546**	**7.0100e-003**	**6.7100e-003**	**368.0287**

6.0 Area Detail

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	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024
Unmitigated	4.3165	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715	0.0000	23.2431	23.2431	0.0224	0.0000	23.8024

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	0.5445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3830					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	0.3890	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715		23.2431	23.2431	0.0224		23.8024
Total	**4.3165**	**0.1484**	**12.8901**	**6.8000e-004**		**0.0715**	**0.0715**		**0.0715**	**0.0715**	**0.0000**	**23.2431**	**23.2431**	**0.0224**	**0.0000**	**23.8024**

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	0.5445					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3830					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	0.3890	0.1484	12.8901	6.8000e-004		0.0715	0.0715		0.0715	0.0715		23.2431	23.2431	0.0224		23.8024
Total	**4.3165**	**0.1484**	**12.8901**	**6.8000e-004**		**0.0715**	**0.0715**		**0.0715**	**0.0715**	**0.0000**	**23.2431**	**23.2431**	**0.0224**	**0.0000**	**23.8024**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Hope Development - San Diego County, Annual

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

Hope Development

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	315.00	Space	1.00	126,000.00	0
Apartments High Rise	156.00	Dwelling Unit	2.04	156,000.00	446

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
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 - Project is 3.04 acres

Construction Phase - Proposed Schedule

Off-road Equipment - CE

Demolition -

Grading - Balanced

Architectural Coating - Rule 67 Compliant Paint

Vehicle Trips - Per Traffic Study

Woodstoves - no hearth units installed

Area Coating - Rule 67 Compliant Paints

Energy Use -

Hope Development - San Diego County, Annual

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

Construction Off-road Equipment Mitigation - Tier 4 Construction Equipment will be utilized

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	18.00	40.00
tblFireplaces	NumberGas	85.80	0.00

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

tblFireplaces	NumberNoFireplace	15.60	156.00
tblFireplaces	NumberWood	54.60	0.00
tblLandUse	LotAcreage	2.84	1.00
tblLandUse	LotAcreage	2.52	2.04
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblVehicleTrips	ST_TR	4.53	6.00
tblVehicleTrips	SU_TR	3.59	6.00
tblVehicleTrips	WD_TR	4.45	6.00
tblWoodstoves	NumberCatalytic	7.80	0.00
tblWoodstoves	NumberNoncatalytic	7.80	0.00

2.0 Emissions Summary

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1501	1.2646	1.4736	3.2800e-003	0.1857	0.0531	0.2388	0.0663	0.0497	0.1160	0.0000	294.0915	294.0915	0.0506	8.2900e-003	297.8248
2025	1.1124	0.9235	1.3201	2.8900e-003	0.0977	0.0358	0.1335	0.0263	0.0337	0.0600	0.0000	259.4792	259.4792	0.0395	7.6300e-003	262.7398
Maximum	**1.1124**	**1.2646**	**1.4736**	**3.2800e-003**	**0.1857**	**0.0531**	**0.2388**	**0.0663**	**0.0497**	**0.1160**	**0.0000**	**294.0915**	**294.0915**	**0.0506**	**8.2900e-003**	**297.8248**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0679	0.9535	1.6533	3.2800e-003	0.1857	1.9200e-003	0.1876	0.0663	1.8600e-003	0.0681	0.0000	294.0913	294.0913	0.0506	8.2900e-003	297.8246
2025	1.0569	0.8343	1.4365	2.8900e-003	0.0977	1.7700e-003	0.0995	0.0263	1.7100e-003	0.0280	0.0000	259.4790	259.4790	0.0395	7.6300e-003	262.7396
Maximum	**1.0569**	**0.9535**	**1.6533**	**3.2800e-003**	**0.1857**	**1.9200e-003**	**0.1876**	**0.0663**	**1.8600e-003**	**0.0681**	**0.0000**	**294.0913**	**294.0913**	**0.0506**	**8.2900e-003**	**297.8246**

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	N20	CO2e
Percent Reduction	**10.91**	**18.29**	**-10.60**	**0.00**	**0.00**	**95.85**	**22.89**	**0.00**	**95.72**	**45.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**6-3-2024**	**9-2-2024**	0.6642	0.4239
2	**9-3-2024**	**12-2-2024**	0.5623	0.4495
3	**12-3-2024**	**3-2-2025**	0.5324	0.4444
4	**3-3-2025**	**6-2-2025**	1.3874	1.3054
5	**6-3-2025**	**9-2-2025**	0.2956	0.2853
		Highest	1.3874	1.3054

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	0.7518	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434
Energy	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	218.1015	218.1015	0.0108	2.2800e-003	219.0499
Mobile	0.4528	0.5037	4.2587	9.0500e-003	0.9997	7.0500e-003	1.0068	0.2668	6.5700e-003	0.2734	0.0000	857.6148	857.6148	0.0598	0.0380	870.4238
Waste						0.0000	0.0000		0.0000	0.0000	14.5666	0.0000	14.5666	0.8609	0.0000	36.0882
Water						0.0000	0.0000		0.0000	0.0000	3.2246	49.8522	53.0768	0.3342	8.1900e-003	63.8733
Total	**1.2107**	**0.5693**	**5.4411**	**9.4400e-003**	**0.9997**	**0.0177**	**1.0174**	**0.2668**	**0.0172**	**0.2840**	**17.7912**	**1,127.4663**	**1,145.2575**	**1.2675**	**0.0484**	**1,191.3786**

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	0.7518	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434
Energy	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	218.1015	218.1015	0.0108	2.2800e-003	219.0499
Mobile	0.4528	0.5037	4.2587	9.0500e-003	0.9997	7.0500e-003	1.0068	0.2668	6.5700e-003	0.2734	0.0000	857.6148	857.6148	0.0598	0.0380	870.4238
Waste						0.0000	0.0000		0.0000	0.0000	14.5666	0.0000	14.5666	0.8609	0.0000	36.0882
Water						0.0000	0.0000		0.0000	0.0000	3.2246	49.8522	53.0768	0.3342	8.1900e-003	63.8733
Total	**1.2107**	**0.5693**	**5.4411**	**9.4400e-003**	**0.9997**	**0.0177**	**1.0174**	**0.2668**	**0.0172**	**0.2840**	**17.7912**	**1,127.4663**	**1,145.2575**	**1.2675**	**0.0484**	**1,191.3786**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2024	7/5/2024	5	25	
2	Site Preparation	Site Preparation	7/6/2024	7/12/2024	5	5	
3	Grading	Grading	7/13/2024	7/24/2024	5	8	

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

4	Building Construction	Building Construction	7/25/2024	6/11/2025	5	230	
5	Architectural Coating	Architectural Coating	4/17/2025	6/11/2025	5	40	
6	Paving	Paving	6/12/2025	7/7/2025	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 1

Residential Indoor: 315,900; Residential Outdoor: 105,300; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,560 (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
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42

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

Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	141.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

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

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0155	0.0000	0.0155	2.3400e-003	0.0000	2.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2434	0.2055	4.2000e-004		0.0111	0.0111		0.0104	0.0104	0.0000	36.8222	36.8222	0.0101	0.0000	37.0735
Total	**0.0258**	**0.2434**	**0.2055**	**4.2000e-004**	**0.0155**	**0.0111**	**0.0266**	**2.3400e-003**	**0.0104**	**0.0127**	**0.0000**	**36.8222**	**36.8222**	**0.0101**	**0.0000**	**37.0735**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	9.4800e-003	2.5800e-003	4.0000e-005	1.2100e-003	8.0000e-005	1.2900e-003	3.3000e-004	8.0000e-005	4.1000e-004	0.0000	4.1566	4.1566	2.2000e-004	6.6000e-004	4.3592
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.7000e-004	3.4800e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.0179	1.0179	3.0000e-005	3.0000e-005	1.0266
Total	**5.6000e-004**	**9.7500e-003**	**6.0600e-003**	**5.0000e-005**	**2.5100e-003**	**9.0000e-005**	**2.6000e-003**	**6.8000e-004**	**9.0000e-005**	**7.6000e-004**	**0.0000**	**5.1745**	**5.1745**	**2.5000e-004**	**6.9000e-004**	**5.3858**

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

3.2 Demolition - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0155	0.0000	0.0155	2.3400e-003	0.0000	2.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5100e-003	0.1410	0.2595	4.2000e-004		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	36.8221	36.8221	0.0101	0.0000	37.0735
Total	**6.5100e-003**	**0.1410**	**0.2595**	**4.2000e-004**	**0.0155**	**1.0000e-004**	**0.0156**	**2.3400e-003**	**1.0000e-004**	**2.4400e-003**	**0.0000**	**36.8221**	**36.8221**	**0.0101**	**0.0000**	**37.0735**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	9.4800e-003	2.5800e-003	4.0000e-005	1.2100e-003	8.0000e-005	1.2900e-003	3.3000e-004	8.0000e-005	4.1000e-004	0.0000	4.1566	4.1566	2.2000e-004	6.6000e-004	4.3592
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e-004	2.7000e-004	3.4800e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.0179	1.0179	3.0000e-005	3.0000e-005	1.0266
Total	**5.6000e-004**	**9.7500e-003**	**6.0600e-003**	**5.0000e-005**	**2.5100e-003**	**9.0000e-005**	**2.6000e-003**	**6.8000e-004**	**9.0000e-005**	**7.6000e-004**	**0.0000**	**5.1745**	**5.1745**	**2.5000e-004**	**6.9000e-004**	**5.3858**

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

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0679	0.0458	1.0000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	8.3643	8.3643	2.7100e-003	0.0000	8.4319
Total	**6.6500e-003**	**0.0679**	**0.0458**	**1.0000e-004**	**0.0491**	**3.0700e-003**	**0.0522**	**0.0253**	**2.8300e-003**	**0.0281**	**0.0000**	**8.3643**	**8.3643**	**2.7100e-003**	**0.0000**	**8.4319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	9.6000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2819	0.2819	1.0000e-005	1.0000e-005	0.2843
Total	**1.1000e-004**	**8.0000e-005**	**9.6000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2819**	**0.2819**	**1.0000e-005**	**1.0000e-005**	**0.2843**

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

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7400e-003	0.0304	0.0574	1.0000e-004		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	8.3643	8.3643	2.7100e-003	0.0000	8.4319
Total	**1.7400e-003**	**0.0304**	**0.0574**	**1.0000e-004**	**0.0491**	**2.0000e-005**	**0.0492**	**0.0253**	**2.0000e-005**	**0.0253**	**0.0000**	**8.3643**	**8.3643**	**2.7100e-003**	**0.0000**	**8.4319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	9.6000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2819	0.2819	1.0000e-005	1.0000e-005	0.2843
Total	**1.1000e-004**	**8.0000e-005**	**9.6000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2819**	**0.2819**	**1.0000e-005**	**1.0000e-005**	**0.2843**

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

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0681	0.0590	1.2000e-004		2.9000e-003	2.9000e-003		2.6700e-003	2.6700e-003	0.0000	10.4256	10.4256	3.3700e-003	0.0000	10.5099
Total	**6.6500e-003**	**0.0681**	**0.0590**	**1.2000e-004**	**0.0283**	**2.9000e-003**	**0.0312**	**0.0137**	**2.6700e-003**	**0.0164**	**0.0000**	**10.4256**	**10.4256**	**3.3700e-003**	**0.0000**	**10.5099**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.0000e-004	1.2800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3758	0.3758	1.0000e-005	1.0000e-005	0.3791
Total	**1.5000e-004**	**1.0000e-004**	**1.2800e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3758**	**0.3758**	**1.0000e-005**	**1.0000e-005**	**0.3791**

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

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0800e-003	0.0413	0.0760	1.2000e-004		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	10.4256	10.4256	3.3700e-003	0.0000	10.5099
Total	**2.0800e-003**	**0.0413**	**0.0760**	**1.2000e-004**	**0.0283**	**3.0000e-005**	**0.0284**	**0.0137**	**3.0000e-005**	**0.0137**	**0.0000**	**10.4256**	**10.4256**	**3.3700e-003**	**0.0000**	**10.5099**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.0000e-004	1.2800e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3758	0.3758	1.0000e-005	1.0000e-005	0.3791
Total	**1.5000e-004**	**1.0000e-004**	**1.2800e-003**	**0.0000**	**4.8000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.3758**	**0.3758**	**1.0000e-005**	**1.0000e-005**	**0.3791**

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

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0839	0.7663	0.9215	1.5400e-003		0.0350	0.0350		0.0329	0.0329	0.0000	132.1540	132.1540	0.0313	0.0000	132.9353
Total	**0.0839**	**0.7663**	**0.9215**	**1.5400e-003**		**0.0350**	**0.0350**		**0.0329**	**0.0329**	**0.0000**	**132.1540**	**132.1540**	**0.0313**	**0.0000**	**132.9353**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0930	0.0323	4.2000e-004	0.0140	5.5000e-004	0.0146	4.0400e-003	5.3000e-004	4.5700e-003	0.0000	41.5801	41.5801	1.3100e-003	6.0200e-003	43.4080
Worker	0.0239	0.0158	0.2011	6.3000e-004	0.0754	4.0000e-004	0.0758	0.0200	3.6000e-004	0.0204	0.0000	58.9132	58.9132	1.6100e-003	1.5600e-003	59.4171
Total	**0.0263**	**0.1088**	**0.2334**	**1.0500e-003**	**0.0894**	**9.5000e-004**	**0.0904**	**0.0241**	**8.9000e-004**	**0.0250**	**0.0000**	**100.4933**	**100.4933**	**2.9200e-003**	**7.5800e-003**	**102.8252**

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

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0304	0.6220	1.0188	1.5400e-003		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	132.1538	132.1538	0.0313	0.0000	132.9351
Total	**0.0304**	**0.6220**	**1.0188**	**1.5400e-003**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**132.1538**	**132.1538**	**0.0313**	**0.0000**	**132.9351**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3800e-003	0.0930	0.0323	4.2000e-004	0.0140	5.5000e-004	0.0146	4.0400e-003	5.3000e-004	4.5700e-003	0.0000	41.5801	41.5801	1.3100e-003	6.0200e-003	43.4080
Worker	0.0239	0.0158	0.2011	6.3000e-004	0.0754	4.0000e-004	0.0758	0.0200	3.6000e-004	0.0204	0.0000	58.9132	58.9132	1.6100e-003	1.5600e-003	59.4171
Total	**0.0263**	**0.1088**	**0.2334**	**1.0500e-003**	**0.0894**	**9.5000e-004**	**0.0904**	**0.0241**	**8.9000e-004**	**0.0250**	**0.0000**	**100.4933**	**100.4933**	**2.9200e-003**	**7.5800e-003**	**102.8252**

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

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0793	0.7232	0.9329	1.5600e-003		0.0306	0.0306		0.0288	0.0288	0.0000	134.5133	134.5133	0.0316	0.0000	135.3038
Total	**0.0793**	**0.7232**	**0.9329**	**1.5600e-003**		**0.0306**	**0.0306**		**0.0288**	**0.0288**	**0.0000**	**134.5133**	**134.5133**	**0.0316**	**0.0000**	**135.3038**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3500e-003	0.0937	0.0323	4.2000e-004	0.0143	5.6000e-004	0.0148	4.1100e-003	5.4000e-004	4.6500e-003	0.0000	41.5031	41.5031	1.3700e-003	6.0100e-003	43.3281
Worker	0.0230	0.0146	0.1922	6.2000e-004	0.0767	3.9000e-004	0.0771	0.0204	3.6000e-004	0.0208	0.0000	58.4826	58.4826	1.5000e-003	1.4900e-003	58.9628
Total	**0.0253**	**0.1083**	**0.2245**	**1.0400e-003**	**0.0910**	**9.5000e-004**	**0.0919**	**0.0245**	**9.0000e-004**	**0.0254**	**0.0000**	**99.9857**	**99.9857**	**2.8700e-003**	**7.5000e-003**	**102.2909**

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

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.6329	1.0367	1.5600e-003		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	134.5131	134.5131	0.0316	0.0000	135.3036
Total	**0.0309**	**0.6329**	**1.0367**	**1.5600e-003**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**134.5131**	**134.5131**	**0.0316**	**0.0000**	**135.3036**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3500e-003	0.0937	0.0323	4.2000e-004	0.0143	5.6000e-004	0.0148	4.1100e-003	5.4000e-004	4.6500e-003	0.0000	41.5031	41.5031	1.3700e-003	6.0100e-003	43.3281
Worker	0.0230	0.0146	0.1922	6.2000e-004	0.0767	3.9000e-004	0.0771	0.0204	3.6000e-004	0.0208	0.0000	58.4826	58.4826	1.5000e-003	1.4900e-003	58.9628
Total	**0.0253**	**0.1083**	**0.2245**	**1.0400e-003**	**0.0910**	**9.5000e-004**	**0.0919**	**0.0245**	**9.0000e-004**	**0.0254**	**0.0000**	**99.9857**	**99.9857**	**2.8700e-003**	**7.5000e-003**	**102.2909**

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

3.6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9937					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4200e-003	0.0229	0.0362	6.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	5.1065	5.1065	2.8000e-004	0.0000	5.1135
Total	**0.9971**	**0.0229**	**0.0362**	**6.0000e-005**		**1.0300e-003**	**1.0300e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**5.1065**	**5.1065**	**2.8000e-004**	**0.0000**	**5.1135**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	1.0100e-003	0.0133	4.0000e-005	5.2900e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	4.0333	4.0333	1.0000e-004	1.0000e-004	4.0664
Total	**1.5800e-003**	**1.0100e-003**	**0.0133**	**4.0000e-005**	**5.2900e-003**	**3.0000e-005**	**5.3200e-003**	**1.4100e-003**	**2.0000e-005**	**1.4300e-003**	**0.0000**	**4.0333**	**4.0333**	**1.0000e-004**	**1.0000e-004**	**4.0664**

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

3.6 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9937					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	0.0212	0.0367	6.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1065	5.1065	2.8000e-004	0.0000	5.1135
Total	**0.9947**	**0.0212**	**0.0367**	**6.0000e-005**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.1065**	**5.1065**	**2.8000e-004**	**0.0000**	**5.1135**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	1.0100e-003	0.0133	4.0000e-005	5.2900e-003	3.0000e-005	5.3200e-003	1.4100e-003	2.0000e-005	1.4300e-003	0.0000	4.0333	4.0333	1.0000e-004	1.0000e-004	4.0664
Total	**1.5800e-003**	**1.0100e-003**	**0.0133**	**4.0000e-005**	**5.2900e-003**	**3.0000e-005**	**5.3200e-003**	**1.4100e-003**	**2.0000e-005**	**1.4300e-003**	**0.0000**	**4.0333**	**4.0333**	**1.0000e-004**	**1.0000e-004**	**4.0664**

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

3.7 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3800e-003	0.0678	0.1096	1.7000e-004		3.1700e-003	3.1700e-003		2.9300e-003	2.9300e-003	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**8.6900e-003**	**0.0678**	**0.1096**	**1.7000e-004**		**3.1700e-003**	**3.1700e-003**		**2.9300e-003**	**2.9300e-003**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.7000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1000	1.1000	3.0000e-005	3.0000e-005	1.1090
Total	**4.3000e-004**	**2.7000e-004**	**3.6200e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1000**	**1.1000**	**3.0000e-005**	**3.0000e-005**	**1.1090**

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

3.7 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6200e-003	0.0706	0.1218	1.7000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	14.7404	14.7404	4.6300e-003	0.0000	14.8562
Paving	1.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.9300e-003**	**0.0706**	**0.1218**	**1.7000e-004**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**14.7404**	**14.7404**	**4.6300e-003**	**0.0000**	**14.8562**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.7000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1000	1.1000	3.0000e-005	3.0000e-005	1.1090
Total	**4.3000e-004**	**2.7000e-004**	**3.6200e-003**	**1.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1000**	**1.1000**	**3.0000e-005**	**3.0000e-005**	**1.1090**

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	tons/yr										MT/yr					
Mitigated	0.4528	0.5037	4.2587	9.0500e-003	0.9997	7.0500e-003	1.0068	0.2668	6.5700e-003	0.2734	0.0000	857.6148	857.6148	0.0598	0.0380	870.4238
Unmitigated	0.4528	0.5037	4.2587	9.0500e-003	0.9997	7.0500e-003	1.0068	0.2668	6.5700e-003	0.2734	0.0000	857.6148	857.6148	0.0598	0.0380	870.4238

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	936.00	936.00	936.00	2,672,564	2,672,564
Parking Lot	0.00	0.00	0.00		
Total	936.00	936.00	936.00	2,672,564	2,672,564

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 High 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

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 High Rise	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Parking Lot	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	157.5302	157.5302	9.6300e-003	1.1700e-003	158.1186
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	157.5302	157.5302	9.6300e-003	1.1700e-003	158.1186
NaturalGas Mitigated	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	60.5713	60.5713	1.1600e-003	1.1100e-003	60.9313
NaturalGas Unmitigated	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	60.5713	60.5713	1.1600e-003	1.1100e-003	60.9313

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 High Rise	1.13506e+006	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	60.5713	60.5713	1.1600e-003	1.1100e-003	60.9313
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		**6.1200e-003**	**0.0523**	**0.0223**	**3.3000e-004**		**4.2300e-003**	**4.2300e-003**		**4.2300e-003**	**4.2300e-003**	**0.0000**	**60.5713**	**60.5713**	**1.1600e-003**	**1.1100e-003**	**60.9313**

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 High Rise	1.13506e+006	6.1200e-003	0.0523	0.0223	3.3000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	60.5713	60.5713	1.1600e-003	1.1100e-003	60.9313
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		**6.1200e-003**	**0.0523**	**0.0223**	**3.3000e-004**		**4.2300e-003**	**4.2300e-003**		**4.2300e-003**	**4.2300e-003**	**0.0000**	**60.5713**	**60.5713**	**1.1600e-003**	**1.1100e-003**	**60.9313**

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 High Rise	599062	146.7287	8.9700e-003	1.0900e-003	147.2768
Parking Lot	44100	10.8015	6.6000e-004	8.0000e-005	10.8418
Total		**157.5302**	**9.6300e-003**	**1.1700e-003**	**158.1186**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	599062	146.7287	8.9700e-003	1.0900e-003	147.2768
Parking Lot	44100	10.8015	6.6000e-004	8.0000e-005	10.8418
Total		**157.5302**	**9.6300e-003**	**1.1700e-003**	**158.1186**

6.0 Area Detail

Hope Development - San Diego County, Annual

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	0.7518	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434
Unmitigated	0.7518	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434

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	0.0994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6174					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	0.0350	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434
Total	**0.7518**	**0.0134**	**1.1601**	**6.0000e-005**		**6.4300e-003**	**6.4300e-003**		**6.4300e-003**	**6.4300e-003**	**0.0000**	**1.8977**	**1.8977**	**1.8300e-003**	**0.0000**	**1.9434**

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	0.0994					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6174					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	0.0350	0.0134	1.1601	6.0000e-005		6.4300e-003	6.4300e-003		6.4300e-003	6.4300e-003	0.0000	1.8977	1.8977	1.8300e-003	0.0000	1.9434
Total	**0.7518**	**0.0134**	**1.1601**	**6.0000e-005**		**6.4300e-003**	**6.4300e-003**		**6.4300e-003**	**6.4300e-003**	**0.0000**	**1.8977**	**1.8977**	**1.8300e-003**	**0.0000**	**1.9434**

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	53.0768	0.3342	8.1900e-003	63.8733
Unmitigated	53.0768	0.3342	8.1900e-003	63.8733

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	10.164 / 6.40776	53.0768	0.3342	8.1900e-003	63.8733
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**53.0768**	**0.3342**	**8.1900e-003**	**63.8733**

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 High Rise	10.164 / 6.40776	53.0768	0.3342	8.1900e-003	63.8733
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**53.0768**	**0.3342**	**8.1900e-003**	**63.8733**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.5666	0.8609	0.0000	36.0882
Unmitigated	14.5666	0.8609	0.0000	36.0882

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 High Rise	71.76	14.5666	0.8609	0.0000	36.0882
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**14.5666**	**0.8609**	**0.0000**	**36.0882**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	71.76	14.5666	0.8609	0.0000	36.0882
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**14.5666**	**0.8609**	**0.0000**	**36.0882**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT B

AERSCREEN

TITLE: HOPE APARTMENTS

********** AREA PARAMETERS **********

SOURCE EMISSION RATE: 0.436E-04 g/s 0.346E-03 lb/hr

AREA EMISSION RATE: 0.354E-08 g/(s-m2) 0.281E-07 lb/(hr-m2)
AREA HEIGHT: 3.00 meters 9.84 feet
AREA SOURCE LONG SIDE: 110.92 meters 363.91 feet
AREA SOURCE SHORT SIDE: 110.92 meters 363.91 feet
INITIAL VERTICAL DIMENSION: 1.00 meters 3.28 feet
RURAL OR URBAN: URBAN
POPULATION: 79000

FLAGPOLE RECEPTOR HEIGHT: 1.50 meters 4.92 feet

INITIAL PROBE DISTANCE = 5000. meters 16404. feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	0.9813E-01	45	75.0	WIN

* = worst case diagonal

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	28	28	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-0.92	0.043	-9.000	0.020	-999.	21.	8.5	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.0	2.0

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR	MO	DY	JDY	HR

```
 -- -- -- --- --
 10 01 28  28 01

    H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 -0.92  0.043 -9.000  0.020 -999.   21.      8.5 1.000   1.50   0.35    0.50

    HT  REF TA     HT
- - - - - - - - - - -
  10.0   310.0    2.0
```

********** AERSCREEN AUTOMATED DISTANCES **********

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.6736E-01	2525.00	0.1314E-02
25.00	0.7883E-01	2550.00	0.1301E-02
50.01	0.8903E-01	2575.00	0.1289E-02
75.00	0.9813E-01	2600.00	0.1277E-02
100.00	0.7155E-01	2625.00	0.1265E-02
125.00	0.5230E-01	2650.00	0.1254E-02
150.01	0.4161E-01	2675.00	0.1243E-02
174.99	0.3468E-01	2700.00	0.1232E-02
200.00	0.2971E-01	2725.00	0.1221E-02
225.00	0.2593E-01	2750.00	0.1211E-02
250.00	0.2295E-01	2775.00	0.1201E-02
274.99	0.2053E-01	2800.00	0.1191E-02
300.00	0.1853E-01	2825.00	0.1182E-02
325.00	0.1685E-01	2850.00	0.1172E-02
350.00	0.1541E-01	2875.00	0.1163E-02
375.01	0.1417E-01	2900.00	0.1155E-02
400.00	0.1310E-01	2925.00	0.1146E-02
425.00	0.1216E-01	2950.00	0.1137E-02
450.00	0.1133E-01	2975.00	0.1129E-02
475.01	0.1059E-01	3000.00	0.1121E-02
500.00	0.9929E-02	3025.00	0.1113E-02
525.00	0.9338E-02	3050.00	0.1106E-02
550.00	0.8802E-02	3075.00	0.1098E-02
575.01	0.8320E-02	3100.00	0.1091E-02
599.99	0.7882E-02	3125.00	0.1083E-02
625.00	0.7482E-02	3150.00	0.1076E-02
650.00	0.7112E-02	3174.99	0.1069E-02
675.00	0.6774E-02	3200.00	0.1062E-02
699.99	0.6465E-02	3225.00	0.1056E-02
725.00	0.6180E-02	3250.00	0.1049E-02
750.00	0.5914E-02	3275.00	0.1043E-02
775.00	0.5665E-02	3300.00	0.1036E-02
800.00	0.5435E-02	3325.00	0.1030E-02
825.00	0.5221E-02	3350.00	0.1024E-02
850.00	0.5022E-02	3375.00	0.1018E-02
875.00	0.4835E-02	3400.00	0.1012E-02
900.01	0.4661E-02	3425.00	0.1006E-02
924.99	0.4497E-02	3450.00	0.1001E-02
950.00	0.4341E-02	3475.00	0.9950E-03
975.00	0.4195E-02	3500.00	0.9895E-03
1000.00	0.4057E-02	3525.00	0.9841E-03
1025.00	0.3926E-02	3550.00	0.9787E-03
1050.00	0.3803E-02	3575.00	0.9735E-03
1075.00	0.3687E-02	3600.00	0.9683E-03
1100.00	0.3577E-02	3625.00	0.9633E-03
1125.00	0.3472E-02	3650.00	0.9582E-03
1150.00	0.3373E-02	3675.00	0.9533E-03
1175.00	0.3279E-02	3700.00	0.9485E-03
1200.00	0.3189E-02	3724.99	0.9437E-03
1225.00	0.3103E-02	3750.00	0.9390E-03
1249.99	0.3022E-02	3775.00	0.9343E-03
1275.00	0.2943E-02	3800.00	0.9297E-03
1300.00	0.2868E-02	3825.00	0.9252E-03
1325.00	0.2798E-02	3849.99	0.9207E-03
1350.00	0.2730E-02	3875.00	0.9163E-03
1375.00	0.2665E-02	3900.00	0.9120E-03
1400.00	0.2603E-02	3924.99	0.9077E-03
1425.00	0.2544E-02	3950.00	0.9035E-03
1450.00	0.2486E-02	3975.00	0.8993E-03
1475.00	0.2431E-02	4000.00	0.8952E-03
1500.00	0.2379E-02	4024.99	0.8911E-03
1525.00	0.2328E-02	4050.00	0.8871E-03
1550.00	0.2280E-02	4074.99	0.8832E-03
1575.00	0.2234E-02	4100.00	0.8792E-03
1600.00	0.2190E-02	4125.00	0.8754E-03
1625.00	0.2147E-02	4149.99	0.8715E-03
1650.01	0.2106E-02	4175.00	0.8678E-03
1674.99	0.2066E-02	4200.00	0.8640E-03
1700.00	0.2028E-02	4225.00	0.8603E-03

1725.00	0.1992E-02	4250.00	0.8567E-03
1750.00	0.1956E-02	4275.00	0.8531E-03
1775.00	0.1922E-02	4300.00	0.8495E-03
1800.00	0.1889E-02	4325.00	0.8460E-03
1825.00	0.1857E-02	4350.00	0.8425E-03
1850.00	0.1827E-02	4375.00	0.8390E-03
1875.00	0.1798E-02	4400.00	0.8356E-03
1900.00	0.1800E-02	4425.00	0.8322E-03
1925.00	0.1771E-02	4450.00	0.8289E-03
1950.00	0.1744E-02	4475.00	0.8256E-03
1975.00	0.1718E-02	4500.00	0.8223E-03
2000.00	0.1692E-02	4525.00	0.8191E-03
2025.00	0.1668E-02	4550.00	0.8159E-03
2050.00	0.1644E-02	4575.00	0.8127E-03
2075.00	0.1621E-02	4600.00	0.8096E-03
2100.00	0.1599E-02	4625.00	0.8065E-03
2125.00	0.1578E-02	4650.00	0.8034E-03
2150.00	0.1557E-02	4675.00	0.8003E-03
2175.00	0.1537E-02	4700.00	0.7973E-03
2200.00	0.1518E-02	4725.00	0.7943E-03
2225.00	0.1499E-02	4750.00	0.7913E-03
2250.00	0.1481E-02	4775.00	0.7884E-03
2275.00	0.1463E-02	4800.00	0.7855E-03
2300.00	0.1446E-02	4825.00	0.7826E-03
2325.00	0.1430E-02	4850.00	0.7798E-03
2350.00	0.1414E-02	4875.00	0.7769E-03
2375.00	0.1398E-02	4900.00	0.7741E-03
2400.00	0.1383E-02	4925.00	0.7714E-03
2425.00	0.1368E-02	4950.00	0.7686E-03
2450.00	0.1354E-02	4975.00	0.7659E-03
2475.00	0.1340E-02	5000.00	0.7632E-03
2500.00	0.1327E-02		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.9880E-01	0.9880E-01	0.9880E-01	0.9880E-01	N/A

DISTANCE FROM SOURCE 77.00 meters

IMPACT AT THE AMBIENT BOUNDARY	0.6736E-01	0.6736E-01	0.6736E-01	0.6736E-01	N/A

DISTANCE FROM SOURCE 1.00 meters

ATTACHMENT C

Health Risk Calculations

Air Quality Health Risk Calculations (Worst-Case)
Hope Apartments (Tier 3 with DPF)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.00166**
	Construction Start	**6/3/2024**
	Construction Complete	**7/7/2025**
	Days	**399**
	Construction Emission per day (lb/day)	**0.008320802**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**4.36264E-05**
	Project Site Size (Acres)	**3.04**
	Project Site Size (meters^2)	**12302.44352**
	Length of Smalles Side (meters)	**110.9163808**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**3.55E-09**
From AERMOD	Concentration Annual (Ug/M^3)	**0.098**

	Days	Days to years					
Duration	399	1.093150685					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.00784	0.00784	0.00784	0.00784	0.00784	0.00784	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00000272	0.00000820	0.00000648	0.00000561	0.00000252	0.00000218	
Construction Days	399	1.093150685					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.093150685	1.093150685	1.093150685	1.093150685	1.093150685	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	9.07294E-08	1.19786E-06	2.40447E-07	2.08052E-07	3.16177E-08	2.73705E-08	
Risk per million Exposed	0.090729408	1.197863676	0.24044673	0.208052048	0.031617654	0.027370506	
Cancer Risk Per Million 9-years	1.53						
Cancer Risk Per Million 30-years	1.53						
Cancer Risk Per Million 70-years	**1.52**						