AIR QUALITY ASSESSMENT

CAR WASH AT EXXONMOBILE & CIRCLE K
MAJOR USE PERMIT PROJECT
VALLEY CENTER, CALIFORNIA
RECORD ID PDS2022-MUP-22-003

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GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
AB	Assembly Bill
APCD	Air Pollution Control District
AQIA	Air Quality Impact Assessment
AQMP	Air Quality Management Plan
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standard
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEQA	California Environmental Quality Act
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
°F	Degrees Fahrenheit
g/L	Grams per Liter
HAP	Hazardous Air Pollutant
HRA	Health Risk Assessment
lb/day	Pounds per day
LOS	Level of Service
MACT	Maximum Achievable Control Technologies
mph	Miles per hour
MUP	Major Use Permit
$\mu g/m^3$	Micrograms per Cubic Meter
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NOE	Notice of Exemption
NO_x	Oxides of Nitrogen
NO_2	Nitrogen Dioxide
OEHHA	Office of Environmental Health Hazard Assessment
O_3	Ozone
Pb	Lead
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (particulate matter with an aerodynamic diameter of 2.5 microns or less)
PM_{10}	Respirable Particulate Matter (particulate matter with an aerodynamic diameter of 10 microns or less)
ppb	Parts per billion
ppm	Parts per million
RAQS	San Diego County Regional Air Quality Strategy
SANDAG	San Diego Association of Governments

GLOSSARY OF TERMS AND ACRONYMS

Acronym	Description
SCAQMD	South Coast Air Quality Management District
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SIP	State Implementation Plan
SLT	Screening Level Thresholds
SO_x	Oxides of Sulfur
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
T-BACT	Toxics Best Available Control Technology
UC Davis	University of California Davis
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

EXECUTIVE SUMMARY

This report presents an assessment of potential air quality impacts associated with the proposed Car Wash at ExxonMobile & Circle K Major Use Permit (MUP) Project (Project) in Valley Center, California. The Project is within the jurisdiction of the Department of Planning and Development Services in the County of San Diego (County) and the San Diego Air Pollution Control District (SDAPCD). The evaluation addresses the potential for air emissions during construction and after full buildout of the Project, including an assessment of the potential for carbon monoxide (CO) "hot spots" to form due to traffic associated with the proposed Project. The air quality analysis for this Project was performed following the County's *Guidelines for Determining Significance - Air Quality* (County of San Diego 2007).

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. The Project proposes an update to a previously-approved project[1] consisting of a 3,022 square foot convenience store and 1,250 square foot restaurant. Under the MUP, a 4,257 square foot convenience store with a 3,300 square foot car wash will now be developed, and the restaurant removed from development. The Project would be built out in 2023, which will be the first year of operations.

On November 2, 2012, the County filed a notice of exemption (NOE) for the previously-approved project stating that the County had found the project to be exempt from a California Environmental Quality Act (CEQA) impact review under the G 15183 Exemption: *Project is Consistent with the Community Plan, General Plan, or Zoning* (County of San Diego 2012).

The Project is consistent with the County's General Plan and with the San Diego Association of Governments' (SANDAG's) housing projections for the region (County of San Diego 2011). The SDAPCD uses these housing and population projections, along with regional emission data, in regional air quality planning. Therefore, the Project is consistent with the 2022 Regional Air Quality Standards (RAQS) for the San Diego region.

To reduce the emissions to the extent feasible, fugitive dust control measures will be implemented during construction. Measures that are incorporated into the Project description to reduce emissions associated with construction include the following:

- Application of water three times daily during grading on active grading sites.
- Application of water three times daily to unpaved roads.
- Reduce speeds to 15 miles per hour (mph) on unpaved roads.
- Use of architectural coatings with Volatile Organic Compounds (VOC) contents compliant with SDAPCD Rule 67.0.1, which requires low-VOC content coatings less than or equal to 50 grams/liter (g/L) VOC for interior and exterior building coatings and less than or equal to 100 g/L for parking lot coatings.

[1] Previous Project E.R. Number 3910 08-01-008, Approved by the County of San Diego Planning & Development Services on October 31, 2012.

These measures constitute best management practices for dust control and architectural coatings emissions.

The proposed Project would result in emissions of air pollutants for both the construction phase and operational phase of the Project. Construction emissions would include emissions associated with fugitive dust, heavy construction equipment and construction workers commuting to and from the site. A comparison of construction emissions from the previously-approved project that included a smaller convenience store and a fast-food restaurant to the construction emissions from the current proposed Project under the MUP shows that emissions of all criteria pollutants except VOC would be lower by comparison. Although VOC emissions due to construction would be higher from the proposed Project, they are still below the County's recommended screening-level thresholds.

The main operational impacts associated with the Project would include impacts associated with traffic, with additional impacts associated with area sources, such as consumer product usage, landscaping, and maintenance (e.g., architectural coating). A comparison of operational emissions from the previously-approved project that included a smaller convenience store and a fast-food restaurant to the operational emissions from the proposed Project shows that emissions of all criteria pollutants would be lower by comparison, and emissions of all pollutants would be below the County's recommended screening-level thresholds.

A discussion of risks associated with diesel particulate matter, the main toxic air contaminant (TAC) of concern from mobile sources, is presented below. The majority of diesel exhaust emissions from construction would have occurred during the rough grading and bulk soil import/export activities previously approved and completed. The remaining TAC emissions will be the same or less than previously approved.

An evaluation of odors indicated that odor impacts would be less than significant.

1.0 INTRODUCTION

1.1 Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Control Board (CARB) regulates at the state level; and the SDAPCD regulates air quality in San Diego County.

CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local air pollution control districts (APCDs) are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide. The County of San Diego is located in the San Diego Air Basin (SDAB), which is under the jurisdiction of the SDAPCD.

Federal

The federal and state governments have been empowered by respective federal and state Clean Air Acts (CAA) to regulate the emissions of airborne pollutants and have established ambient air quality standards for the protection of public health. The federal CAA requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for pollutants that are common in outdoor air, considered harmful to public health and environment, and that come from numerous and diverse sources. In California, the California Environmental Protection Agency (CalEPA), has delegated the oversight of air quality management to CARB, which is a department of the CalEPA. Local control over air quality management is provided by CARB through multi-county and county-level APCDs (also referred to as Air Quality Management Districts). The federal and state standards are summarized in Table 1. The federal "primary" standards have been established to protect the public health. The federal "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soil, water, visibility, materials, vegetation, and other aspects of the general welfare.

State

CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA), meeting state requirements of the federal Clean Air Act and establishing the California Ambient Air Quality Standards (CAAQS). It is also responsible for setting emission standards for vehicles sold in California and for other emission sources such as consumer products and certain off-road equipment. CARB also established passenger vehicle fuel specifications and oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level. The CCAA is administered by CARB at the state level and by the Air Quality Management Districts at the regional level.

Local

The SDAPCD was created to protect the public from the harmful effects of air pollution, achieve and maintain air quality standards, foster community involvement and develop and implement cost-effective programs that meet state and federal mandates while considering environmental and economic impacts. Specifically, the SDAPCD is responsible for monitoring air quality and planning, implementing, and enforcing programs designed to attain and maintain the NAAQS and CAAQS in the district. Programs developed include air quality rules and regulations that regulate stationary source emissions, including area sources, point sources, and certain mobile source emissions. The SDAPCD is also responsible for establishing permitting requirements for stationary sources and ensuring that new, modified or relocated stationary sources do not create net emissions increases; and thus, are consistent with the region's air quality goals. The SDAPCD provides Air Quality Impact Assessments (AQIA) significance thresholds in Regulation II, Rule 20.2, Table 20-2-1, “AQIA Trigger Levels.” These trigger levels were established for stationary sources of air pollution and are commonly used for environmental evaluations. The SDAPCD

enforces air quality rules and regulations through a variety of means, including inspections, educational or training programs, or fines, when necessary.

TABLE 1
NATIONAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page ...

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 $\mu g/m^3$ 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 measurement method 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 U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

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

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 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 SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

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

12. 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 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, 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.

State Implementation Plan / Regional Air Quality Strategy

The federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. SIPs are comprehensive plans that describe how an area will attain the NAAQS. SIPs are a compilation of new and previously submitted plans, programs (i.e., monitoring, modeling and permitting programs), district rules, state regulations and federal controls and include pollution control measures that demonstrate how the standards will be met through those measures.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The most recent SIP element for San Diego County was submitted in October 2020 (SDAPCD 2020). The document defines the plan for attaining the NAAQS for ozone in San Diego County. On September 22, 2022, CARB adopted the most recent state SIP strategy, which includes additional measures and information needed to support nonattainment areas SIPs (CARB 2022).

Thus, the RAQS and Air Quality Management Plan (AQMP) prepared by SDAPCD and referenced herein become part of the SIP as the material relates to efforts ongoing in San Diego to achieve the NAAQS and CAAQS. The San Diego RAQS was developed pursuant to CCAA requirements. The RAQS was initially adopted in 1991 and was updated in 1995, 1998, 2001, 2004, 2009, 2016, and, most recently, in 2022 (SDAPCD 2023a).

The RAQS was initially adopted by the SDAPCD Board on June 30, 1992, and amended on March 2, 1993, in response to CARB comments. The RAQS identifies feasible emission control measures aimed at San Diego County's future attainment of the state ozone standard. The proposed and scheduled measures included in the 2022 RAQS provide additional direct emission reductions of ozone precursors [volatile organic compounds (VOC) and oxides of nitrogen (NO_x)], as well as indirect reductions of particulate matter (PM) emissions. All of these measures will further reduce air pollution beyond levels established in the 2016 RAQS. At present, no attainment plan for particulate matter less than 10 microns in diameter (PM_{10}) or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) is required by the state regulations; however, SDAPCD has adopted measures to reduce particulate matter in San Diego County. These measures range from regulation against open burning to incentive programs that introduce cleaner technology. These measures can be found in a report titled "*Measures to Reduce Particulate Matter in San Diego County"* December 2005 (SDAPCD 2005).

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in the county, to estimate future emissions and then determine strategies necessary for the reduction of emissions through regulatory controls. CARB's mobile source emission projections and SANDAG growth projections are based on population and vehicle trends as well as land use plans developed by the cities and the County as part of

the development of the individual General Plans. As such, projects that propose development consistent with the growth anticipated by the general plans would be consistent with the RAQS. If a project proposes development which is less dense than anticipated within the General Plan, the project would likewise be consistent with the RAQS. If a project proposes development that is greater than that anticipated in the General Plan and SANDAG's growth projections, the project might conflict with the RAQS and SIP; and thus, have a potentially significant impact on air quality.

Under state law, the SDAPCD is required to prepare an AQMP for pollutants for which the SDAB is designated non-attainment. Each iteration of the SDAPCD's AQMP is an update of the previous plan and has a 20-year horizon. The District prepared its *2020 PLAN FOR ATTAINING THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE IN SAN DIEGO COUNTY* (Attainment Plan), demonstrating how the region will further reduce air pollutant emissions in order to attain the current NAAQS for ozone in the future. Approved by the District Board on October 14, 2020, this Attainment Plan was submitted to CARB for approval. The plan was approved by CARB on November 19, 2020 and was incorporated into the 2022 SIP (CARB 2020 and CARB 2022). The ozone plan was submitted to the USEPA for review prior to the close of calendar year 2020. Comments from the USEPA are pending. These plans are available for download on the CARB website located at the following web address: ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans/nonattainment-area-plans/san-diego-county.

Air Pollutants of Concern

Criteria Air Pollutants

The seven criteria air pollutants regulated under the NAAQS are as follows: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), respirable particulate matter (or particulate matter with an aerodynamic diameter of 10 microns or less, PM_{10}), fine particulate matter (or particulate matter with an aerodynamic diameter of 2.5 microns or less, $PM_{2.5}$), sulfur dioxide (SO_2), and lead (Pb). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere. Areas that do not meet the NAAQS for a particular pollutant are considered to be "non-attainment areas" for that pollutant.

CARB is the state regulatory agency with authority to enforce regulations to both achieve and maintain air quality in the state. CARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The CCAA provides the state with the ability to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards, or more stringent.

Through the CCAA, CARB has established the CAAQS for six criteria air pollutants also regulated by the NAAQS, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The SDAB is currently classified as a non-attainment area under the CAAQS for O_3,

PM_{10}, and $PM_{2.5}$. It should be noted that CARB does not differentiate between attainment of the 1-hour and 8-hour CAAQS for O_3; therefore, if an air basin records an exceedance of either standard, the area is considered non-attainment for the CAAQS for O_3. The SDAB has recorded exceedances of both the 1-hour and 8-hour CAAQS for O_3.

Table 2 shows the long- and short-term health impacts due to exposure to these criteria air pollutants and lists the main sources of these pollutants (USEPA 2022).

TABLE 2
SUMMARY OF SOURCES AND HEALTH EFFECTS ASSOCIATED WITH CRITERIA AIR POLLUTANTS

Pollutant	Sources	Effects on Health
Ozone (O_3)	• Photochemical oxidant (not emitted directly); instead, chemically formed when volatile organic compounds (VOCs) and oxides of nitrogen (NO_X) react in the presence of ultraviolet light; • Many VOCs are released as fugitive sources; and • VOCs and NO_X are combustion by-products.	• Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue
$PM_{2.5}$ (particulate matter [PM] less than 2.5 microns in aerodynamic diameter)	• Fugitive dust PM primarily composed of PM_{10} with a small fraction consisting of $PM_{2.5}$; • PM from combustion sources primarily composed of $PM_{2.5}$ with a small fraction consisting of particles larger than $PM_{2.5}$ and smaller than PM_{10}.	• Premature death • Hospitalization for worsening of cardiovascular disease • Hospitalization for respiratory disease • Asthma-related emergency room visits • Increased symptoms, increased inhaler usage
PM_{10} (particulate matter less than 10 microns in aerodynamic diameter)	• See $PM_{2.5}$.	• Premature death & hospitalization, primarily for worsening of respiratory disease
Nitrogen Oxides (NO_X)	• All combustion sources; especially a by-product of higher temperature combustion.	• Lung irritation • Enhanced allergic responses
Carbon Monoxide (CO)	• All combustion sources; especially a by-product of incomplete combustion.	• Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
Sulfur Oxides (SO_X)	• Coal- or oil-burning power plants and industries; • Refineries; and • Diesel-/gasoline-fired engines.	• Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits

TABLE 2
SUMMARY OF SOURCES AND HEALTH EFFECTS ASSOCIATED WITH CRITERIA AIR POLLUTANTS

Pollutant	Sources	Effects on Health
Lead (Pb)	• Metal smelters; • Resource recovery; • Leaded fuels (esp. aircraft, racing); and • Deterioration of lead-based paint.	• Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage
Hydrogen Sulfide (H_2S)	• Landfills and sewer gas; • Geothermal power plants; and • Petroleum production and refining.	• At high concentrations: headache & breathing difficulties
Sulfates	• Fully-oxidized, ionic form of sulfur; • See SO_X. • SO_X converted to sulfate compounds in the atmosphere.	• Same as $PM_{2.5}$; particularly worsening of asthma and other lung diseases
Vinyl Chloride	• Primarily results from microbial breakdown of chlorinated solvents, especially in: ○ Landfills; ○ Sewage plants; and ○ Hazardous waste sites.	• Central nervous system effects, such as dizziness, drowsiness & headaches • Long-term exposure: liver damage and liver cancer

The SDAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment." San Diego County is listed as a federal non-attainment area for ozone (8-hour) and a state non-attainment area for ozone (1-hour and 8-hour standards), PM_{10} and $PM_{2.5}$. As shown in Table 3, the SDAB is in attainment for the state and federal standards for nitrogen dioxide, carbon monoxide, sulfur dioxide and lead (SDAPCD 2023b).

TABLE 3
SUMMARY OF SAN DIEGO AIR BASIN (SDAB)
FEDERAL AND STATE ATTAINMENT STATUS

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Non-attainment (Severe)	Non-attainment
Ozone (1-Hour)	Attainment *	Non-attainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable **	Non-attainment
$PM_{2.5}$	Attainment	Non-attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment

TABLE 3 SUMMARY OF SAN DIEGO AIR BASIN (SDAB) FEDERAL AND STATE ATTAINMENT STATUS		
Criteria Pollutant	**Federal Designation**	**State Designation**
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

* The federal 1-hour standard of 12 ppm 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 non-attainment, the area is designated as unclassifiable.

Toxic Air Contaminants

TACs are controlled under a different regulatory process than criteria pollutants. Because no safe level of emissions can be established for TACs region-wide, the regulation of TACs is based on the levels of cancer risk and other health risks posed to persons who may be exposed.

Under federal law, 188 substances are listed as Hazardous Air Pollutants (HAPs) that are TACs. Major sources of specific HAPs are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) program. The USEPA establishes regulatory schemes for specific source categories and requires implementation of Maximum Achievable Control Technologies (MACTs) for major sources of HAPs in each source category.

State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program, and is aimed at HAPs that are a concern in California. The state has formally identified more than 200 substances as TACs and has adopted appropriate control measures for each. Once adopted at the state level, each air district is required to adopt a measure that is equally or more stringent. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) enacted in 1987 requires certain applicable facilities in San Diego County to quantify the emissions of TACs, and in some cases, conduct a health risk assessment (HRA), and to notify the public, while developing risk reduction strategies. In San Diego County, SDAPCD Rule 1210 implements the public notification and risk reduction requirements of AB 2588 and requires facilities to reduce risks to acceptable levels within 5 years. In addition, SDAPCD Rule 1200 establishes acceptable risk levels, and emission control requirements for new and modified facilities that may emit TACs.

An example of TAC emissions would be the proposed Project’s generation of diesel exhaust emissions from construction-related vehicles and equipment and operational phases. Diesel exhaust is mainly composed of particulate matter and gases, which contain potential cancer-causing substances in addition to some noncancer hazards.

On August 27, 1998, CARB and the Office of Environmental Health Hazard Assessment (OEHHA) identified particulate matter in diesel exhaust as a TAC, based on data linking diesel particulate emissions to increased risks of lung cancer and respiratory disease.

Background Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring station to the Project site had been the Escondido monitoring station, which measured O_3, PM_{10}, $PM_{2.5,}$ CO, and NO_2. Because the Escondido monitoring station no longer collects data and the nearest locations are either coastal or more subject to coastal influences, the next most representative inland valley location was chosen as the El Cajon-Lexington Elementary School location; this monitoring is assumed to be the most representative of the Project area and would thus provide a conservative estimate of background ambient air quality. A summary of ambient pollutant concentrations and exceedances for the most recent three years are presented in Table 4.

The 8-hour federal ozone standard was exceeded at the El Cajon-Lexington Elementary School monitoring station 14 times in 2020. The standard was also exceeded two times in both 2018 and 2019. The El Cajon-Lexington Elementary School monitoring station has also measured exceedances of the 24-hour NAAQS for $PM_{2.5}$. The El Cajon-Lexington Elementary School monitoring station has measured exceedances of the CAAQS for ozone during the period from 2018 to 2020. The data from the monitoring station indicates that air quality is in attainment of all other standards.

TABLE 4
AMBIENT AIR BACKGROUND POLLUTANT CONCENTRATIONS / EXCEEDANCES/ STANDARDS

Pollutant	2019	2020	2021
Ozone (O_3)			
State maximum 1-hour concentration (ppm)	**0.094**	**0.094**	**0.088**
National maximum 8-hour concentration (ppm)	**0.074**	**0.083**	**0.076**
State maximum 8-hour concentration (ppm)	**0.075**	**0.083**	**0.077**
Number of Days Standard Exceeded			
CAAQS 1-hour (>0.09 ppm)	0	0	0
CAAQS 8- hour (>0.070 ppm)/NAAQS 8-hour (>0.070 ppm)	2 / 2	14 / 14	3 / 3
Respirable Particulate Matter (PM_{10})			
National maximum 24-hour concentration ($\mu g/m^3$)	38.7	55**	40**
State maximum 24-hour concentration ($\mu g/m^3$)	37.4	**55****	40**
State annual average concentration ($\mu g/m^3$)	**23**	**23.5****	**22.0****
Annual or Days Standard Exceeded *			
NAAQS 24-hour (>150 $\mu g/m^3$)	0	0	0
CAAQS 24-hour (>50 $\mu g/m^3$)/Annual (>20 $\mu g/m^3$)	0 / Yes	** / Yes	** / Yes
Fine Particulate Matter ($PM_{2.5}$)			
National Maximum 24-hour concentration ($\mu g/m^3$)	23.8	**38.2**	30.2
State maximum 24-hour concentration ($\mu g/m^3$)	25.7	41.6	31.5
Annual average concentration ($\mu g/m^3$)	8.5	10.3	9.7
Annual or Days Standard Exceeded *			
NAAQS 24-hour (>35 $\mu g/m^3$)/Annual (>12.0 $\mu g/m^3$)	0 / No	2 / No	0 / No
CAAQS Annual (>12 $\mu g/m^3$)	No	No	No

Notes:
$\mu g/m^3$ = micrograms per cubic meter; ppb = parts per billion; ppm = parts per million; N/A = Not available.
CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard.
-- = Insufficient data was available.
BOLD value indicates greater than standard.
PM_{10}, O_3, and $PM_{2.5}$ measured at the El Cajon – Lexington Elementary School monitoring station (1155 Redwood Ave, approximately 31 miles south-southeast of the Project site); while not closest, it is located in an inland valley similar to Valley Center.
* In the case of an Annual standard a No or Yes response is provided.
** Measured at the El Cajon station using SDAPCD 5-year Air Quality Summary, as there was not a complete set of data for local stations on iADAM.
Sources: CARB 2023, SDAPCD 2021a

1.2 Purpose of the Report

This report presents an assessment of potential air quality impacts associated with the proposed Project at ExxonMobile & Circle K in Valley Center, California. The Project is within the jurisdiction of the Department of Planning and Development Services in the County of San Diego. The evaluation addresses the potential for air emissions during construction and after full buildout of the Project, including an assessment of the potential for CO "hot spots" to form due to traffic associated with the proposed Project. In this evaluation, the construction and operational emissions for the convenience store and fast-food restaurant in the previously-approved project are compared to the construction and operational emissions for the larger convenience store and car wash.

This Air Quality Technical Report includes an evaluation of existing conditions in the Project vicinity, an assessment of potential impacts associated with Project construction, and an evaluation of Project operational impacts.

1.3 Project Location and Description

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. A vicinity map is provided on Figure 1. Construction of the previously-approved project is underway.

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. The Project proposes an update to a previously-approved project consisting of a 3,022 square foot convenience store and 1,250 square foot restaurant. Under the MUP, a 4,257 square foot convenience store with a 3,300 square foot car wash will now be developed, and the restaurant removed from development. The Project would be built out in 2023, which will be the first year of operations. A schematic site plan is provided in Figure 2.

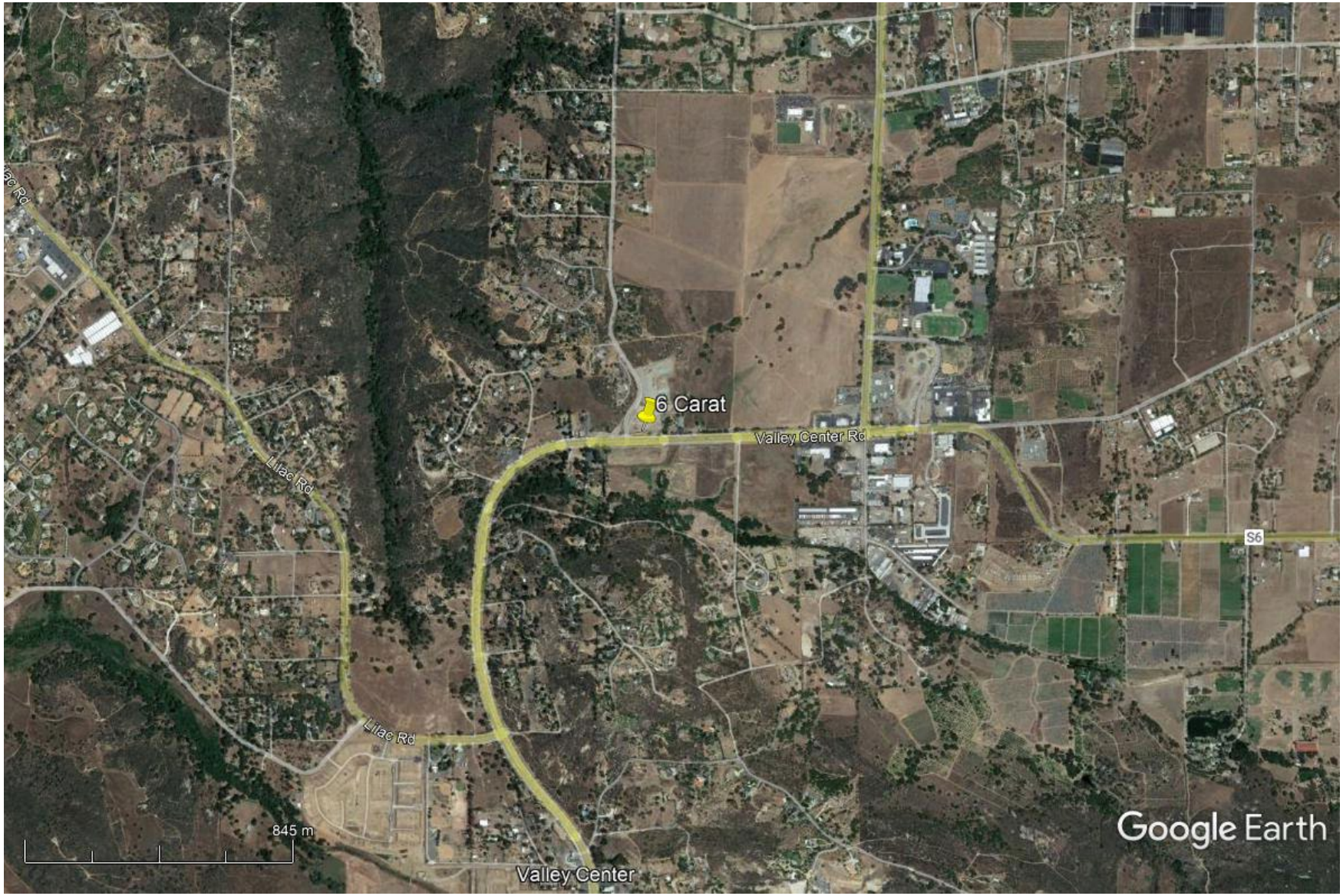

FIGURE 1: PROJECT LOCATION AND VICINITY

FIGURE 3
PROPOSED PROJECT SITE PLAN FOR THE EXXON MOBIL/CIRCLE K C -STORE/CAR WASH (BUILDING C)

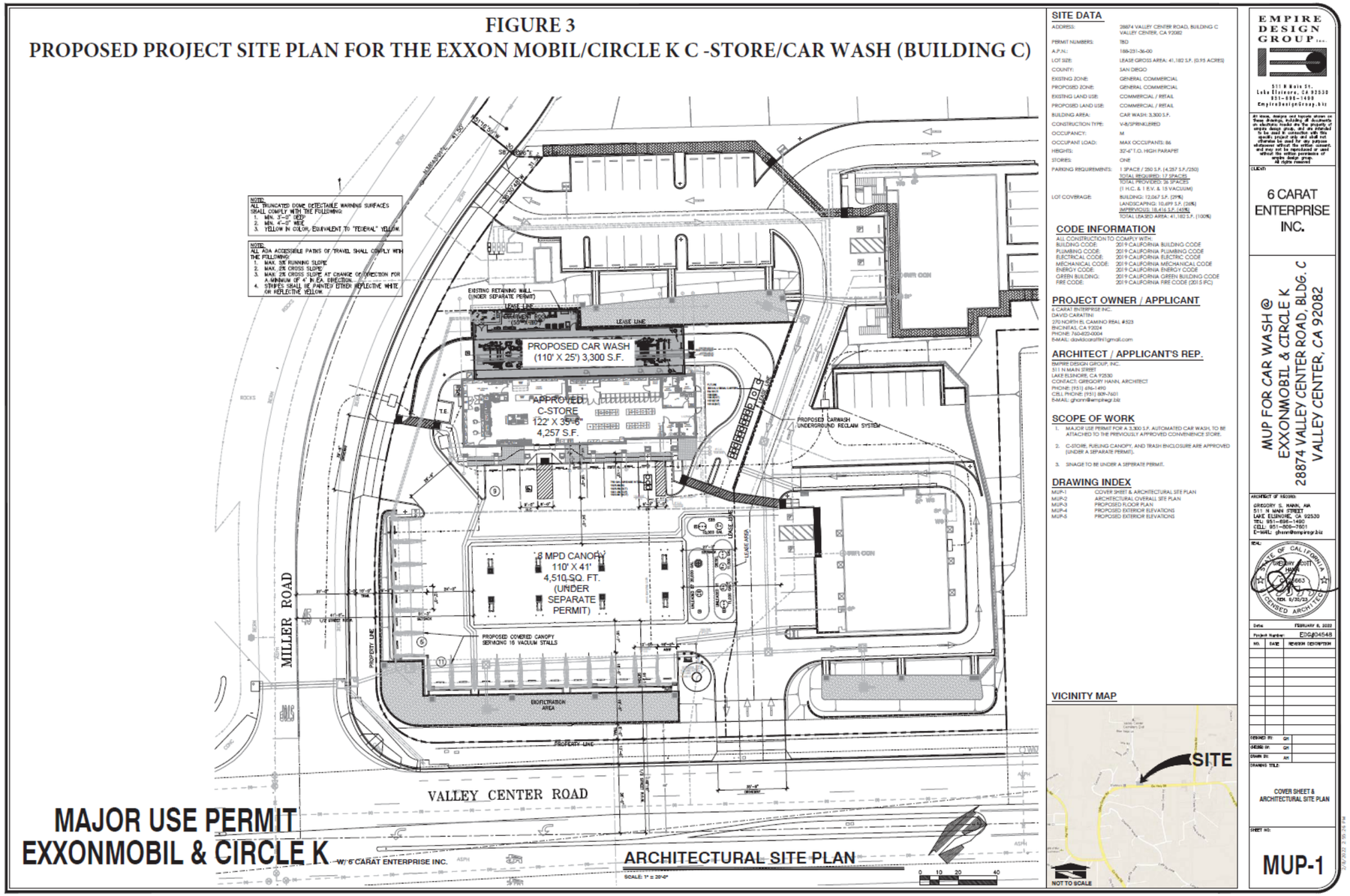

FIGURE 2: PROJECT SITE PLAN

2.0 EXISTING CONDITIONS

2.1 Existing Setting

The Project site is located in Valley Center within unincorporated San Diego County. Construction has already begun on the approved elements of the previously-approved project. There are currently no structures requiring demolition prior to construction of the Project and grading of the site has already been completed. The site is relatively flat. Sensitive receptors in the vicinity of the site include a single-family residence located about 80 meters to the northwest and some businesses and professional offices located 30 meters east, 120 meters southwest and 150 meters west of the Project site. There are large areas of open land in the area with very low density of residences and businesses.

2.2 Climate and Meteorology

The Project area, like the rest of San Diego County's inland valley areas, has a Mediterranean climate characterized by warm, dry summers and mild, wet winters. The average annual temperature in the Escondido area (the nearest climatic monitoring station where temperature data are measured) is 62.5 degrees Fahrenheit (°F), with an average maximum temperature of 75.4 °F and an average minimum temperature of 49.5°F. The highest temperatures occur in July, when the average maximum temperature is 87.1°F. The lowest temperatures occur in December, when the average minimum temperature is 39.1°F (WRCC 2022). The average annual precipitation is 15.7 inches. Most precipitation occurs from November through April (WRCC 2022).

The dominant meteorological feature affecting the region is the Pacific high-pressure zone, which produces the prevailing westerly to northwesterly winds. These winds tend to transport pollutants from the coastal areas toward the inland areas. Data collected by the SDAPCD indicate that pollutant levels are often lower at the coast and higher inland as pollutants become trapped by the local mountains. Pollutants may be trapped by periodic temperature inversions. A temperature inversion is a thin layer of the atmosphere where the decrease in temperature with elevation is less than normal. The inversion does not allow pollutants to be transported, but traps pollutants resulting in increased concentrations. Generally, the morning inversion layer is lower than the afternoon inversion layer; therefore, pollutant concentrations tend to be higher in the afternoon.

The SDAPCD measures meteorological data in locations where it operates a monitoring station. There is no monitoring station that measures micro-scale meteorology in the Valley Center area. The nearest monitoring station to the site is the Escondido monitoring station.

The Project site is located in the SDAB. The climate of the SDAB is dominated by the semi-permanent Pacific high-pressure zone located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains

clear skies for much of the year. Figure 3 provides a graphic representation of winds in the vicinity of the site; they are mostly from the west with average wind speed of approximately 3.0 miles per hour (SDAPCD 2021b), as measured at the SDAPCD's Escondido Monitoring Station (the station is now retired but had been the closest meteorological monitoring station to the site). The high-pressure zone also creates two types of temperature inversions that may act to degrade local air quality.

Subsidence inversions occur during the warmer months as descending air associated with the Pacific high-pressure zone comes into contact with cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce ozone, commonly known as smog.

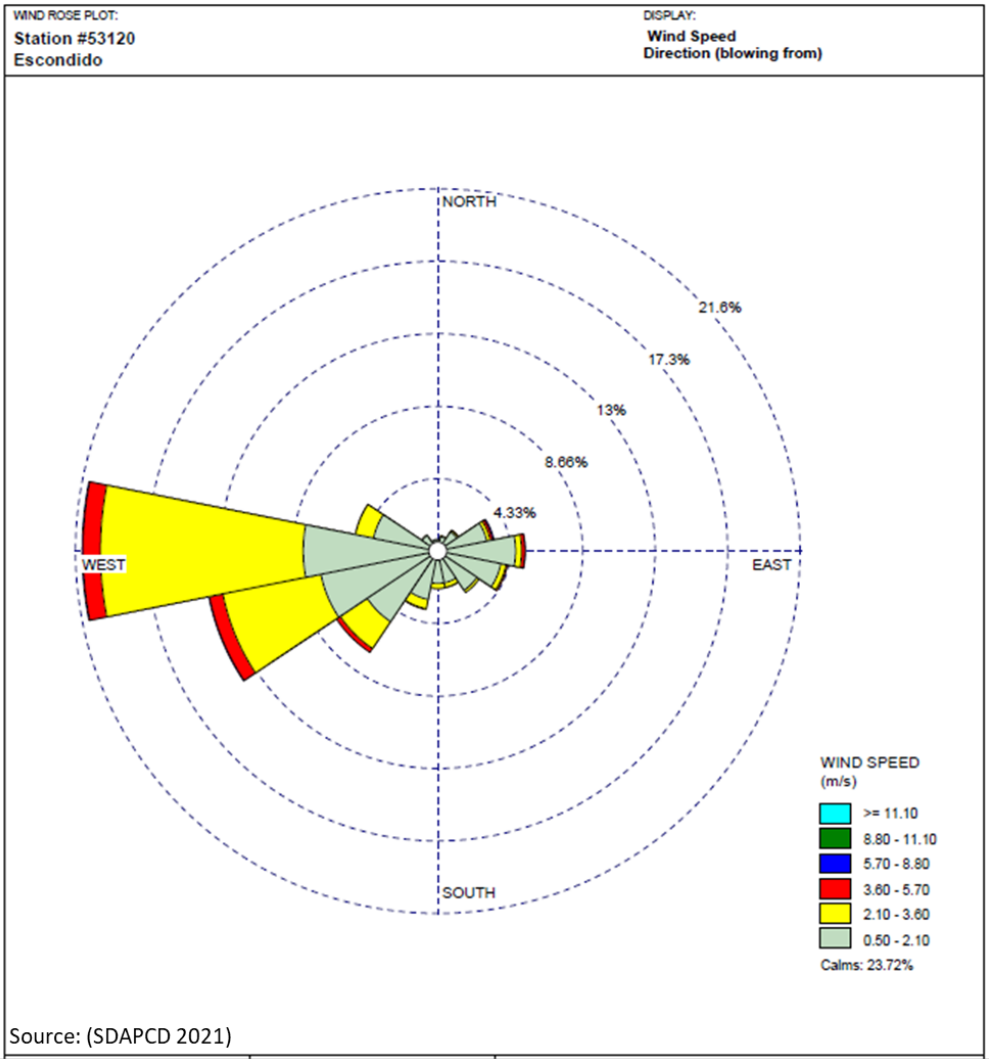

FIGURE 1: WIND ROSE - ESCONDIDO MONITORING STATION

3.0 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGIES

The County of San Diego (County of San Diego 2007) has approved guidelines for determining significance based on Appendix G.III of the State CEQA Guidelines. Section 4.0 of the County of *Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality* (County of San Diego 2007) provides guidance that a project would have a significant environmental impact if:

1. The project will conflict with or obstruct the implementation of the San Diego RAQS and/or applicable portions of the SIP.
2. The project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3. The project will result in emissions that exceed 250 pounds per day of NO_X, or 75 pounds per day of VOCs.
4. The project will result in emissions of carbon monoxide that when totaled with the ambient concentrations will exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm.
5. The project will result in emissions of $PM_{2.5}$ that will exceed 55 pounds per day.
6. The project will result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentration by 5 micrograms per cubic meter (5.0 $\mu g/m^3$) or greater at the maximum exposed individual.
7. The project will result in a cumulatively considerable net increase of any criteria pollutant for which the San Diego Air Basin is non-attainment under an applicable NAAQS or CAAQS (including emissions which exceed the Screening Level Thresholds (SLTs) for ozone precursors listed in Table 5 of the Guidelines).
8. The project will expose sensitive receptors to substantial pollutant concentrations.
9. The project which is not an agricultural, commercial or an industrial activity subject to SDAPCD standards, as a result of implementation, will either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which will affect a considerable number of persons or the public.

The County of San Diego recognizes the SDAPCD's established trigger level thresholds for air quality emissions (Rules 20.1 et seq.) as screening-level thresholds for land development projects. As stated above, projects that propose development that is consistent with the growth anticipated by the general plans and SANDAG's growth forecasts would be consistent with the RAQS and SIP. Also, projects that are consistent with the SIP rules (i.e., the federally-approved rules and regulations adopted by the SDAPCD) are consistent with the SIP. Thus, projects would be required to conform with measures adopted in the RAQS (including use of low-VOC architectural coatings, use of low-NO_X water heaters, and compliance with rules and

regulations governing stationary sources) and would also be required to comply with all applicable rules and regulations adopted by the SDAPCD.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or (b) result in a cumulatively considerable net increase of PM_{10} or $PM_{2.5}$ or exceed quantitative thresholds for O_3 precursors, NO_X and VOCs, project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of AQIAs. The County of San Diego has also approved the use of the South Coast Air Quality Management District's (SCAQMD's) screening threshold of 55 pounds per day or 10 tons per year as a significance threshold for $PM_{2.5}$; this is also consistent with USEPA's "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. The County of San Diego further approves the use of SCAQMD's threshold of significance for VOCs for the Coachella Valley of 75 pounds per day or 13.7 tons per year (County of San Diego 2007).

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. The screening thresholds are included in Table 5 below.

TABLE 5
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	**Total Emissions**		
Operational Emissions			
Criteria Pollutant	**Lb Per Hour**	**Lb per Day**	**Tons per Year**
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	55	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	75	13.7

Source: County of San Diego 2007

Because County SLTs are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS, the NAAQS and CAAQS, in turn, are scientifically substantiated, numerical concentrations of criteria air pollutants considered to be protective of human health. A project with emissions rates below these thresholds is considered to have a less than significant impact on regional and local air quality and would have a low potential for resulting in impacts to human health due to the nexus between SLTs, ambient air quality standards, and public health, and would not be required to incorporate mitigation measures to comply.

In the event that emissions exceed these screening-level thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the NAAQS and CAAQS, including appropriate background levels. For nonattainment pollutants (ozone, with ozone precursors NO_X and VOCs, $PM_{2.5}$ and PM_{10}), if emissions exceed the thresholds shown in Table 5, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

According to the County's CEQA guidelines, the hourly and yearly SLTs are most appropriately used in situations when temporary emissions like emergency generators or other stationary sources are proposed as part of a project. The daily SLTs are most appropriately used for the standard construction and operational emissions (County of San Diego 2007). Because there are no sources in the proposed Project that meet the temporary emissions criteria, this analysis uses the daily SLTs to analyze emissions impacts from the previously-approved project and from the proposed Project.

In addition to impacts from criteria pollutants, Project impacts may include emissions of pollutants identified by the state and federal government as TACs or HAPs. In San Diego County, the Planning and Development Services Department identifies an excess cancer risk level of 1 in one million or less for projects that do not implement Toxics Best Available Control Technology (T-BACT), and an excess cancer risk level of 10 in one million or less for projects that do implement T-BACT as a significant impact. The significance threshold for non-cancer health effects is a health hazard index of one or less. These significance thresholds are consistent with the San Diego Air Pollution Control District's Rule 1210 requirements for stationary sources. If a project has the potential to result in emissions of any TAC or HAP which result in a cancer risk of greater than 1 in one million without T-BACT, 10 in one million with T-BACT, or health hazard index of one or more, the project would be deemed to have a potentially significant impact.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as residences, schools (Preschool-12th Grade), hospitals, resident care facilities, or day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. Any project which has the potential to directly impact a sensitive receptor located within one mile and results in a health risk greater than the risk significance thresholds discussed above would be deemed to have a potentially significant impact. One mile was chosen as a conservative means of evaluating significance. As discussed in the SCAQMD's CEQA Air Quality Handbook, if there is an industrial source within a quarter mile of a sensitive receptor, planners should review the potential for toxic impacts. Therefore, use of a one-mile radius is conservative.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use which would produce

objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

The impacts associated with construction and operation of the Project were evaluated for significance based on these significance criteria. Emissions associated with construction and operation of the convenience store/restaurant in the previously-approved project and of the convenience store/car wash in the proposed Project were evaluated with the California Emissions Estimator Model (CalEEMod) Model, Version 2020.4.0 (CAPCOA 2021).

4.0 PROJECT IMPACT ANALYSIS

The proposed Project includes both construction and operational impacts. Construction impacts include emissions associated with the construction of the Project. Operational impacts include emissions associated with the Project, including traffic, at full buildout.

4.1 Conformance to the Regional Air Quality Strategy

4.1.1 Guidelines for the Determination of Significance

The Project will result in a significant impact to air quality if:

The project will conflict with or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) and/or applicable portions of the State Implementation Plan (SIP).

The RAQS fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the RAQS. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the RAQS is based on projections from local general plans. Projects that are consistent with the local general plan or do not trigger SANDAG's intergovernmental review criteria are considered consistent with the RAQS.

4.1.2 Significance of Impacts Prior to Mitigation

As discussed in Section 1.0, the proposed Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County.

The Project is located at Valley Center Road and Miller Road within the Valley Center Community of San Diego County. The Project proposes an update to a previously-approved project consisting of a 3,022 square foot convenience store and 1,250 square foot restaurant. Under the MUP, a 4,257 square foot convenience store with a 3,300 square foot car wash will now be developed, and the restaurant removed

from development. The Project would be built out in 2023, which will be the first year of operations.

The Project is consistent with the General Plan and the land use designations. The existing land use designation is Commercial/Retail, and the Project's local retail, grocery and car wash uses are consistent with such a designation (County of San Diego 2007). The Project provides local retail uses within the Valley Center area. The Project will therefore be consistent with the land use projections within the RAQS and SIP.

As part of its attainment planning process, the SDAPCD proposes and adopts Rules and Regulations to control air pollutants to demonstrate further progress toward attainment as part of the RAQS and SIP. The Project also will comply with any applicable rules and regulations that have been adopted as part of the RAQS and SIP by the SDAPCD.

4.1.3 Design Considerations and Mitigation Measures

Based on the General Plan, the Project would be consistent with current land uses and with the County's Plan. The Project is therefore consistent with the RAQS and SIP.

4.1.4 Conclusions

Because the Project is consistent with the allowable land use at the site, the Project is consistent with the RAQS and SIP.

4.2 Conformance to Federal and State Ambient Air Quality Standards

The Project will result in a significant impact to air quality if:

- ***The project would result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.***
- ***The project will result in emissions that exceed 250 pounds per day of NO_X, or 75 pounds per day of VOCs.***
- ***The project will result in emissions of carbon monoxide that when totaled with the ambient concentrations will exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm.***
- ***The project will result in emissions of $PM_{2.5}$ that will exceed 55 pounds per day.***
- ***The project will result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentration by 5 micrograms per cubic meter (5.0 $\mu g/m^3$) or greater at the maximum exposed individual.***

4.2.1 Construction Impacts

4.2.1.1 Guidelines for the Determination of Significance

Based on the County of San Diego Guidelines (County of San Diego 2007), construction impacts would be potentially significant if they exceed the quantitative screening-level thresholds for attainment pollutants (NO_2, SO_2, and CO), and would result in a significant impact if they exceed the screening-level thresholds for nonattainment pollutants (ozone precursors and particulate matter).

4.2.1.2 Significance of Impacts Prior to Mitigation

Emissions associated with the Project and previously-approved project construction were estimated using the CalEEMod Model, Version 2020.4.0. The construction schedule is based on default construction schedules included in CalEEMod. Although all necessary demolition, grading, and site preparation has already been completed per the previously-approved project, these phases are still included to be conservative. Construction of the Project would be conducted in one phase. Construction was to commence in the fall of 2022 and was anticipated to be complete in Spring of 2023. While this timeframe has passed, this emissions analysis remains relevant for an updated timeframe in the future. Table 6 presents a summary of the construction phases assumed for the Project and for the previously-approved project. Utilities would be installed as part of the building construction; building construction equipment includes backhoes/loaders that would be used to install utility lines.

The land use types modeled in CalEEMod for the previously-approved project were "Convenience Market with Gas Pumps" and "Fast Food Restaurant w/o Drive Thru." The land use types modeled in CalEEMod for the proposed Project were "Convenience Market with Gas Pumps" and "Automobile Care Center" which is the best land-use type that CaleEEMod offers for a car wash.

TABLE 6
CONSTRUCTION SCHEDULE AND PHASING

Phase	Phase Name	Phase Type	Start Date	End Date
1	Demolition	Demolition	10/3/22	10/14/22
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022
3	Grading	Grading	10/18/2022	10/19/2022
4	Building Construction	Building Construction	10/20/2022	3/8/2023
5	Paving	Paving	3/9/2023	3/15/2023
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023

CalEEMod relies on the total area of the site and estimates site disturbance based on the maximum acres that can be graded given the construction equipment input in an 8-hour day. The Project would be subject to the requirements of SDAPCD Rule 50,

Visible Emissions, which states that a person shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any period of 60 consecutive minutes which is darker in shade than that designated as Number 1 on the Ringelmann Chart; Rule 51, Nuisance, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property; and Rule 55.0, Fugitive Dust Control, which restricts the discharge of visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60 minute period, and requires construction activities to control track-out.

To account for standard dust control measures within the CalEEMod Model, it was assumed that watering three times day would reduce particulate matter emissions by 61%. It was also assumed that the Project would use architectural coatings that are compliant with SDAPCD Rule 67.0.1, which requires low-VOC content coatings less than or equal to 50 g/L VOC for interior and exterior building coatings and less than or equal to 100 g/L for parking lot coatings.

Tables 7 and 8 provide a summary of the emission estimates for construction of the previously-approved project and of the proposed Project in pounds per day (lb/day). Table 9 provides a comparison of the previously-approved project's modeled emissions to the proposed Project's modeled emissions. Refer to Appendix A for detailed CalEEMod Model outputs.

TABLE 7
MAXIMUM DAILY ESTIMATED CONSTRUCTION EMISSIONS
PREVIOUSLY-APPROVED PROJECT

Emissions by Season						
Construction Year and Season (lb/day)	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2022						
Summer	1.11	12.0	7.7	0.01	2.66	1.50
Winter	1.11	12.0	7.7	0.01	2.66	1.50
2023						
Summer	4.2	6.5	7.5	0.01	0.41	0.30
Winter	4.2	6.5	7.4	0.01	0.41	0.30
Maximum Daily Emissions	**4.2**	**12.0**	**7.7**	**0.01**	**2.66**	**1.50**
Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

TABLE 8 MAXIMUM DAILY ESTIMATED CONSTRUCTION EMISSIONS PROPOSED PROJECT						
Emissions by Season						
Construction Year and Season (lb/day)	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2022						
Summer	1.11	12.0	7.7	0.01	2.66	1.50
Winter	1.11	12.0	7.7	0.01	2.66	1.50
2023						
Summer	7.2	6.5	7.5	0.01	0.41	0.30
Winter	7.2	6.5	7.4	0.01	0.41	0.30
Maximum Daily Emissions	**7.2**	**12.0**	**7.7**	**0.01**	**2.66**	**1.50**
Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

TABLE 9 COMPARISON OF ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS PREVIOUSLY-APPROVED PROJECT AND PROPOSED PROJECT						
	lb/day					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions – Previously-Approved Project	4.15	12.0	7.73	0.01	2.66	1.50
Maximum Daily Emissions - Proposed Project	7.20	12.0	7.73	0.01	2.66	1.50
Net Maximum Daily Emissions	**+3.1**	**0**	**0**	**0**	**0**	**0**

Table 9 shows that construction emissions of NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ would not change due to the larger convenience store and the replacement of the fast-food restaurant with a car wash. The identical NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions are expected, because the default construction equipment amounts and construction schedule is identical for the two scenarios. The construction emissions of VOC would increase with these Project updates (mostly due to the higher amount of architectural coatings that would be required for the larger buildings). However, the small increase from 4.15 lbs/day to 7.2 lbs/day VOC from construction still does not exceed the County's significance threshold of 75 lbs/day VOC.

4.2.1.3 Design Considerations

Project construction would employ dust control measures to reduce impacts as feasible. Dust control measures would include watering the site at least three times daily during active grading and reducing speeds on unpaved surfaces to 15 mph. The Project must also comply with SDAPCD Rule 55.0, which requires control of fugitive dust emissions such that they do not extend off site. In addition, the Project would

utilize low-VOC coatings in accordance with SDAPCD Rule 67.0.1 requirements. The Project would reduce emissions to the extent feasible. Emissions would therefore be less than significant.

4.2.1.4 Design Considerations

Impacts were found to be less than significant, so no mitigation measures are required.

4.2.1.5 Conclusions

Project criteria pollutants emissions during construction would be less than significant.

4.2.2 Operational Impacts

4.2.2.1 Guidelines for the Determination of Significance

Based on the County of San Diego Guidelines (County of San Diego 2007), operational impacts would be potentially significant if they exceed the quantitative screening-level thresholds for attainment pollutants (NO_2, SO_2, and CO), and would result in a significant impact if they exceed the screening-level thresholds for nonattainment pollutants (ozone precursors and particulate matter).

4.2.2.2 Significance of Impacts Prior to Mitigation

The main operational impacts associated with the Project would include impacts associated with traffic; additional emissions would be associated with area sources, such as consumer product usage; landscaping; and maintenance (e.g., architectural coating). Emissions are attributable to the following sources:

- Vehicles from trips generated by the Project. Trip generation rates for the previously-approved project and the proposed Project were obtained from the Traffic Impact Study (Darnell 2022). Because trip generation rates for the convenience market and car wash were combined in the traffic study, the total trip rates entered into CalEEMod were assigned to the convenience market land use, with no trip rates assigned to the car wash.
- Architectural coatings application for maintenance purposes.
- Consumer products use.
- Landscaping equipment use.
- Energy use – electricity use.

Project operational emissions for the first year of operations (2023) were estimated using the CalEEMod Model, Version 2020.4.0. Emissions were calculated for both summer and winter conditions, as well as for annual operations. Trip distances are based on the CalEEMod Model for a rural land use for conservative purposes.

The results of the emission calculations for buildout conditions, in lb/day, are summarized in Tables 10 and 11 for the previously-approved project and for the proposed Project, with a comparison to the County's significance thresholds. Table 12 provides a comparison of the previously-approved project's modeled operational emissions to the proposed Project's modeled operational emissions. The CalEEMod outputs are presented in Appendix A.

TABLE 10
TOTAL DAILY OPERATIONAL EMISSIONS – PREVIOUSLY-APPROVED PROJECT

Operation Source, Season (lb/day)	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer Emissions						
Area	0.10	0.00002	0.002	0	0.00001	0.00001
Energy	0.01	0.06	0.05	0.0004	0.005	0.005
Mobile	3.44	2.30	19.2	0.03	3.02	0.82
Total	**3.54**	**2.36**	**19.3**	**0.03**	**3.02**	**0.83**
Winter Emissions						
Area	0.10	0.00002	0.002	0	0.00001	0.00001
Energy	0.01	0.06	0.05	0.0004	0.005	0.005
Mobile	3.28	2.51	21.1	0.03	3.02	0.82
Total	**3.38**	**2.57**	**21.2**	**0.03**	**3.02**	**0.83**
Maximum Daily Emissions	**3.54**	**2.57**	**21.2**	**0.03**	**3.02**	**0.83**
Significance Threshold	**75**	**250**	**550**	**250**	**100**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

TABLE 11 TOTAL DAILY OPERATIONAL EMISSIONS – PROPOSED PROJECT						
Operation Source, Season (lb/day)	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Area	0.17	0.00002	0.002	0	0.00001	0.00001
Energy	0.001	0.01	0.01	0.0001	0.001	0.001
Mobile	2.22	1.30	10.7	0.01	1.39	0.38
Total	**2.39**	**1.31**	**10.7**	**0.01**	**1.39**	**0.38**
Winter Emissions						
Area	0.17	0.00002	0.002	0	0.00001	0.00001
Energy	0.001	0.01	0.01	0.0001	0.001	0.001
Mobile	2.10	1.43	12.1	0.01	1.39	0.38
Total	**2.27**	**1.44**	**12.1**	**0.01**	**1.39**	**0.38**
Maximum Daily Emissions	**2.39**	**1.44**	**12.1**	**0.01**	**1.39**	**0.38**
Significance Threshold	**75**	**250**	**550**	**250**	**100**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

TABLE 12 COMPARISON OF MAXIMUM ESTIMATED DAILY OPERATIONAL EMISSIONS PREVIOUSLY-APPROVED PROJECT AND PROPOSED PROJECT						
Operational Year 2023	**lb/day**					
	VOC	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions – Previously-Approved Project	3.54	2.57	21.2	0.03	3.02	0.83
Maximum Daily Emissions - Proposed Project	2.39	1.44	12.1	0.01	1.39	0.38
Net Maximum Daily Emissions	**-1.2**	**-1.1**	**-9.1**	**-0.02**	**-1.63**	**-0.45**

Table 12 shows that daily operational emissions of all the criteria pollutants would be lower due to the larger convenience store and the replacement of the fast-food restaurant with a car wash. This is due to the fact that default energy usage and trip generation default numbers for Fast Food land use are much higher than they are for an Auto Care Center land use. Emissions associated with the proposed Project remain below the County's screening-level thresholds for all pollutants. Because vehicular emissions decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, future emissions would decrease.

Although CO is not a regional air quality concern in SDAB, elevated CO levels can occur at or near intersections that experience severe traffic congestion. A localized air quality impact is considered significant if the additional CO emissions resulting from the Project create a "hotspot" where the California 1-hour standard of 20.0 ppm

or the 8-hour standard of 9 ppm is exceeded. This can occur at severely congested intersections during cold winter temperatures. Screening for elevated CO levels is recommended for severely congested intersections experiencing levels of service (LOS) E or F with project traffic where a significant project traffic impact may occur. The potential for CO hotspots is based on the University of California Davis (UC Davis) CO Protocol defined in the Transportation Project-Level Carbon Monoxide Protocol Revised December 1997 UCD-ITS-RR-97 (UC Davis 1997). Section 4.7 of the protocol provides specific criteria for performing a screening level CO review for projects within a CO attainment area. Specifically, project-related traffic that would worsen the LOS at intersections operating at LOS E or F, would be subject to a detailed evaluation. If not, no further review is necessary. The traffic study prepared by Darnell & Associates, Inc. most recently revised on March 22, 2022, did not address LOS designations for nearby intersections, but it compared traffic volumes from the approved previously-approved project to proposed Project traffic volumes and found that the proposed Project would generate fewer trips per day than the approved previously-approved project would generate. Because of this, the LOS designation for nearby intersections with the proposed Project would be an improvement over the previously-approved project; an LOS evaluation is therefore not required for the proposed Project. (Darnell 2022).

The Project would thus not result in a CO "hot spot" due to its trip generation. Operational impacts would therefore be less than significant.

4.2.2.3 Conclusions

Operational maximum daily emissions of all criteria pollutants would be less than the screening-level thresholds for both the previously-approved project and the proposed Project operations and would therefore not result in a significant impact to the ambient air quality.

4.3 Cumulatively Considerable Net Increase of Criteria Pollutants

The Project will result in a significant impact to air quality if:

The project will result in a cumulatively considerable net increase of any criteria pollutant for which the San Diego Air Basin is non-attainment under an applicable Federal or State Ambient Air Quality Standard (including emissions which exceed the SLTs for ozone precursors listed in Table 5 of the Guidelines).

4.3.1 Construction Impacts

4.3.1.1 Guidelines for the Determination of Significance

Based on the County of San Diego guidelines (County of San Diego 2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in pollutants for which the SDAB is listed as nonattainment for the CAAQS and NAAQS. As discussed in Section 2.0, the SDAB is

considered a nonattainment area for the NAAQS for ozone and the CAAQS for ozone, PM_{10}, and $PM_{2.5}$.

Cumulatively considerable net increases during the construction phase would typically happen if two or more projects near each other are simultaneously constructing projects. A project that has a significant direct impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_X, or VOCs during construction would also have a significant cumulatively considerably net increase. In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the guidelines identified in Section 3.0.

4.3.1.2 Significance of Impacts Prior to Mitigation

As most of the impacts from construction would occur during the grading phase, it is reasonable to conduct a cumulative impact analysis for the grading phase of the proposed Project. However, because the grading of the Project site has already been completed, a cumulative impact study for the grading phase is no longer relevant.

As shown in Table 9, the impacts from all other phases of construction of the proposed Project versus the previously-approved project would be unchanged or, in the case of VOC, would only slightly increase, yet remain well below significance level thresholds. Therefore, cumulative impacts due to the proposed Project would be less than significant for this reason.

4.3.1.3 Design Considerations

As no cumulatively considerable impact has been identified for the proposed Project, no design considerations are required.

4.3.1.4 Conclusions

Impacts would be less than significant.

4.3.2 Operational Impacts

4.3.2.1 Guidelines for the Determination of Significance

As discussed above, based on the County of San Diego guidelines (County of San Diego 2007), a project would result in a cumulatively significant impact if the project results in a significant contribution to the cumulative increase in NO_X, VOCs, PM_{10}, and $PM_{2.5}$. In accordance with the guidelines, a project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of nonattainment pollutants would also have a cumulatively considerable net increase. Also, projects that cause road intersections to operate at or below a LOS E and create a CO "hot spot" create a cumulatively considerable net increase of CO.

4.3.2.2 Significance of Impacts Prior to Mitigation

As Table 12 shows, emissions of nonattainment pollutants PM_{10}, $PM_{2.5}$, NO_X, or VOCs due to operations of the proposed Project would be less than operational emissions for the previously-approved project. The proposed Project would therefore not result in a cumulatively considerable net increase in nonattainment pollutants. The proposed Project would not result in a CO "hot spot" and is consistent with the General Plan. The proposed Project would therefore not have a cumulatively significant impact.

4.3.2.2 Design Considerations

Impacts were found to be less than significant, so no mitigation measures are required.

4.3.2.3 Conclusions

The proposed Project's operations would not have a cumulatively considerable impact on air quality.

4.4 Impacts to Sensitive Receptors

4.4.1 Guidelines for the Determination of Significance

The Project will result in a significant impact to air quality if:

The project will expose sensitive receptors to substantial pollutant concentrations.

Air quality regulators typically define "sensitive receptors" as schools, hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. However, for the purpose of CEQA analysis, the County of San Diego definition of "sensitive receptors" includes residences (County of San Diego 2007). The two primary emissions of concern for impacts to sensitive receptors are CO and diesel particulate matter. As discussed in Section 4.2.2.2, operational impacts would not result in CO "hot spots". This analysis therefore focuses on diesel particulate matter.

4.4.2 Significance of Impacts Prior to Mitigation

The proposed Project does not propose specific stationary sources that would generate TACs that are not commonly associated with retail and car wash development projects. If stationary sources with the potential to emit TACs were to be included as part of the Project, or at a later date, those sources would be subject to SDAPCD Rule 1200, and would be subject to New Source Review requirements.

The nearest sensitive receptor is a house located approximately 270 feet to the northwest of the Project. Due to the short-term construction duration, the limited construction emissions, and the industrial land use surrounding the Project site, there

is very low potential for fugitive dust or diesel particulate matter (DPM) to impact sensitive receptors during construction. The total Project construction DPM emissions are not of a magnitude and duration that could create significant air toxic risks to the nearest receptors during construction. Table 9 shows that the previously-approved project's PM_{10} and $PM_{2.5}$ construction emissions are the same as the proposed Project's PM_{10} and $PM_{2.5}$ construction emissions. Compliance with the SDAPCD rules and regulations would reduce the fugitive dust emissions during Project construction and associated impacts to sensitive receptors. The proposed Project's operating emissions would be even less than the previously-approved project's operating emissions and would not have the potential to impact sensitive receptors. Therefore, the proposed Project's construction and operation air pollutant emissions would not expose sensitive receptors to substantial pollutant concentrations and would result in a less than significant impact.

Vehicular traffic may result in emissions of TACs other than DPM. Minor amounts of TACs are found in light-duty vehicle exhaust; however, the main source of on-road TACs is from diesel-powered heavy-duty trucks. Because the previously-approved project's operational emission are higher than the operational emissions of the proposed Project, no increased risks to surrounding sensitive receptors would be anticipated from the proposed Project's operations.

4.4.3 Mitigation Measures and Design Considerations

Because impacts to sensitive receptors from construction and operational emissions would be less than significant, no additional mitigation measures are required.

4.4.4 Conclusions

Impacts to sensitive receptors would be less than significant.

4.5 Odor Impacts

4.5.1 Guidelines for the Determination of Significance

The Project will result in a significant impact to air quality if:

The project, which is not an agricultural, commercial or an industrial activity subject to SDAPCD standards, as a result of implementation, will either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which will affect a considerable number of persons or the public.

4.5.2 Significance of Impacts Prior to Mitigation

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust during construction and vehicle traffic idling or emissions during operations. Because the construction equipment would be operating at various locations throughout the construction site, and because any operation that

would occur in the vicinity of existing receptors would be temporary, impacts associated with odors during construction are therefore not considered significant.

During construction, diesel equipment operating at the site may generate some nuisance odors; however, due to the distance of sensitive receptors to the Project site and the temporary nature of construction, odors associated with Project construction would be less than significant. The Project is not considered a source of objectionable odors from operations.

4.5.3 Design Considerations

Because the Project would not generate objectionable odors or place sensitive receptors near existing odor sources that would affect a considerable number of persons or the public, no additional design considerations are required.

4.5.4 Conclusions

Due to the nature of the Project as a retail and car wash land use, the Project is not identified as a specific source of nuisance odors. Odor impacts are therefore less than significant.

5.0 SUMMARY OF RECOMMENDED DESIGN FEATURES, IMPACTS, AND MITIGATION

In summary, the proposed Project would result in emissions of air pollutants for both the construction phase and operational phase of the Project. The air quality impact analysis evaluated the following air quality issues, and made the following conclusions:

- ***The project will not conflict with or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQS) and/or applicable portions of the State Implementation Plan (SIP).***

The Project is consistent with the SANDAG projections for the San Diego Region, and with the County's General Plan. The Project provides local car wash and retail services to the Valley Center community. Accordingly, the proposed Project would be consistent with the RAQS and SIP and no significant impact would result.

- ***The project will not result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.***

- ***The project will not result in emissions that exceed 250 pounds per day of NOx, or 75 pounds per day of VOCs.***

- ***The project will not result in emissions of carbon monoxide that when totaled with the ambient concentrations will exceed a 1-hour***

concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm.

- ***The project will not result in emissions of $PM_{2.5}$ that will exceed 55 pounds per day.***

- ***The project will not result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentration by 5 micrograms per cubic meter (5.0 $\mu g/m^3$) or greater at the maximum exposed individual.***

Both construction and operational emissions were evaluated to address these impacts. During both construction and operations, the proposed Project would result in emissions that are less than the screening-level thresholds for all criteria pollutants. To reduce the emissions to the extent feasible, fugitive dust control measures will be implemented during construction. Measures that are incorporated into the Project description to reduce emissions associated with construction include the following:

- Application of water three times daily during grading on active grading sites
- Application of water three times daily to unpaved roads
- Reduce speeds to 15 mph on unpaved roads
- Use architectural coatings with a VOC content compliant with SDAPCD Rule 67.0.1

These measures constitute best management practices for dust control and architectural coatings emissions.

Operational emissions would be associated with traffic accessing the Project, and with area sources such as energy use and landscaping. Based on the evaluation of air emissions, the proposed Project emissions would not exceed the screening-level thresholds. Furthermore, emissions associated with traffic would decrease with time as older vehicles are phased out and more stringent emission standards are applied to new vehicles. Impacts will be less than significant.

- ***The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the San Diego Air Basin is non-attainment under an applicable Federal or State Ambient Air Quality Standard (including emissions which exceed the SLTs for ozone precursors listed in Table 5 of the Guidelines).***

Emissions of nonattainment pollutants would be consistent with the construction emissions evaluated in the RAQS and SIP for construction projects and would not be cumulatively considerable. Emissions of PM_{10} would be localized and would not result in a cumulatively considerable impact.

Operational emissions are below the screening-level thresholds and would not be cumulatively considerable.

- ***The project will not expose sensitive receptors to substantial pollutant concentrations.***

As discussed in Section 4.4, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations.

- ***The project, which is not an agricultural, commercial or an industrial activity subject to SDAPCD standards, as a result of implementation, will not generate objectionable odors or place sensitive receptors next to existing objectionable odors which will affect a considerable number of persons or the public.***

The proposed Project would not generate objectionable odors that would affect a considerable number of persons or the public. Odor impacts are less than significant.

6.0 REFERENCES

CARB 2020. San Diego Air Quality Management Plans, California Air Resources Board October 2020. Available at: ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans/nonattainment-area-plans/san-diego-county

CARB 2022. *2022 State Strategy for the State Implementation Plan*, California Air Resources Board, Adopted September 22, 1022. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-08/2022_State_SIP_Strategy.pdf

CARB 2023. iADAM Air Quality Data Statistics, California Air Resources Board, Accessed on March 15, 2023. Available at: https://www.arb.ca.gov/adam/topfour/topfour1.php

CAPCOA 2021. California Emissions Estimator Model (CalEEMod, version 2020.4.0), CAPCOA, Released May 2021. Available at: www.aqmd.gov/caleemod/home

County of San Diego 2007. *Guidelines for Determining Significance and Report Format and Content Requirements – Air Quality*. County of San Diego Land Use and Environmental Group, Department of Planning and Land Use, Department of Public Works. March 19, 2007. Available at: www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf

County of San Diego 2011. *San Diego County General Plan, A Plan for Growth, Conservation, and Sustainability, County of San Diego, Adopted August 3, 2011*. Available at: www.sandiegocounty.gov/pds/generalplan.html

County of San Diego 2012. Filing of Notice of Exemption in Compliance with Public Resources Code Section 21108 or 21152, County of San Diego, November 2, 2012.

Darnell 2022. *Local Mobility Analysis (LMA) and Vehicle Miles Traveled (VMT) for Miller Plaza Exxon Mobil/Circle K Project located at the northeast corner of Valley Center Road and Miller Road in Valley Canter (County Project No. PDS 2020-STP-00-013 M3),* Darnell & Associates, March 22, 2022.

SDAPCD 2005. *Measures to Reduce Particulate Matter in San Diego County.* San Diego Air Pollution Control District, December 2005. Available at: www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/JVR/AdminRecord/IncorporatedByReference/Section-2-2---Air-Quality-References/SDAPCD%202005.pdf

SDAPCD 2020. *2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County*, San Diego Air Pollution Control District, October 2020. Available at: https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans/nonattainment-area-plans/san-diego-county-0

SDAPCD 2021a. SDAPCD 5-Year Air Quality Summary Annual Report (2017 – 2021). Available at: https://www.sdapcd.org/content/dam/sdapcd/documents/monitoring/5-Year-Air-Quality.pdf

SDAPCD 2021b. Meteorological data provided by SDAPCD, Escondido MET station, 2010-2012, email to BlueScape Environmental. August 1, 2021.

SDAPCD 2023a. *2022 Revision of the Regional Air Quality Strategy*, San Diego Air Pollution Control District, Revised March 9, 2023. Available at: https://www.sdapcd.org/content/sdapcd/planning.html

SDAPCD 2023b. Attainment Status, San Diego Air Pollution Control District, Accessed June 13, 2023. Available at: https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html

UC Davis 1997. Transportation Project-Level Carbon Monoxide Protocol, University of California Davis, Revised, December 1997.

USEPA 2022. Criteria Air Pollutants, US Environmental Protection Agency, last updated August 9, 2022. Available at: https://www.epa.gov/criteria-air-pollutants

WRCC 2022. Temperature and Precipitation Data, 1971-2000 Monthly Climate Summary for Station 042862 (Escondido), Western Regional Climate Center, Accessed September 2022. Available at: https://wrcc.dri.edu/cgi-bin/cliNORM2000tM.pl?caesco

7.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

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APPENDIX A

CALEEMOD EMISSION CALCULATIONS

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6 Carat Convenience Store and Restaurant

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.25	1000sqft	0.03	1,250.00	0
Convenience Market with Gas Pumps	16.00	Pump	0.05	3,022.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
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 - Convenience store size 3,022 SF

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100
g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 446 trips/day for fast food, 1306 trips/day for fueling station w/ c-store.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	3,022.00
tblVehicleTrips	ST_TR	322.50	81.63
tblVehicleTrips	ST_TR	696.00	356.80
tblVehicleTrips	SU_TR	322.50	81.63
tblVehicleTrips	SU_TR	500.00	356.80
tblVehicleTrips	WD_TR	322.50	81.63
tblVehicleTrips	WD_TR	346.23	356.80

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					
2022	1.1065	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.4364	1,425.4364	0.4432	3.5400e-003	1,436.9842
2023	4.1518	6.4632	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,168.1473	1,168.1473	0.3581	3.3800e-003	1,176.7631
Maximum	**4.1518**	**12.0198**	**7.7283**	**0.0147**	**5.3777**	**0.5177**	**5.8953**	**2.5860**	**0.4762**	**3.0622**	**0.0000**	**1,425.4364**	**1,425.4364**	**0.4432**	**3.5400e-003**	**1,436.9842**

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					
2022	1.1065	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.4364	1,425.4364	0.4432	3.5400e-003	1,436.9842
2023	4.1518	6.4632	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,168.1473	1,168.1473	0.3581	3.3800e-003	1,176.7631
Maximum	**4.1518**	**12.0198**	**7.7283**	**0.0147**	**2.1374**	**0.5177**	**2.6550**	**1.0192**	**0.4762**	**1.4954**	**0.0000**	**1,425.4364**	**1,425.4364**	**0.4432**	**3.5400e-003**	**1,436.9842**

6 Carat Convenience Store and Restaurant - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	58.64	0.00	51.37	59.68	0.00	46.61	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 Not 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	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Energy	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
Mobile	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.2209	3,169.2209	0.3432	0.1978	3,236.7353
Total	**3.5441**	**2.3600**	**19.2882**	**0.0315**	**2.9888**	**0.0319**	**3.0206**	**0.7962**	**0.0300**	**0.8262**		**3,241.4999**	**3,241.4999**	**0.3446**	**0.1991**	**3,309.4440**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Energy	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
Mobile	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.2209	3,169.2209	0.3432	0.1978	3,236.7353
Total	**3.5441**	**2.3600**	**19.2882**	**0.0315**	**2.9888**	**0.0319**	**3.0206**	**0.7962**	**0.0300**	**0.8262**		**3,241.4999**	**3,241.4999**	**0.3446**	**0.1991**	**3,309.4440**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,408; Non-Residential Outdoor: 2,136; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**		**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0292**	**0.0190**	**0.2589**	**7.5000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**75.7708**	**75.7708**	**2.1900e-003**	**1.9700e-003**	**76.4114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**	**0.0000**	**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0292**	**0.0190**	**0.2589**	**7.5000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**75.7708**	**75.7708**	**2.1900e-003**	**1.9700e-003**	**76.4114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0146	9.5000e-003	0.1295	3.7000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		37.8854	37.8854	1.0900e-003	9.8000e-004	38.2057
Total	**0.0146**	**9.5000e-003**	**0.1295**	**3.7000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**37.8854**	**37.8854**	**1.0900e-003**	**9.8000e-004**	**38.2057**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2068**	**0.2573**	**0.4641**	**0.0223**	**0.2367**	**0.2591**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0146	9.5000e-003	0.1295	3.7000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		37.8854	37.8854	1.0900e-003	9.8000e-004	38.2057
Total	**0.0146**	**9.5000e-003**	**0.1295**	**3.7000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**37.8854**	**37.8854**	**1.0900e-003**	**9.8000e-004**	**38.2057**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2071	6.0000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		60.6166	60.6166	1.7500e-003	1.5700e-003	61.1291
Total	**0.0234**	**0.0152**	**0.2071**	**6.0000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**60.6166**	**60.6166**	**1.7500e-003**	**1.5700e-003**	**61.1291**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.0717**	**0.5173**	**2.5889**	**1.0017**	**0.4759**	**1.4776**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2071	6.0000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		60.6166	60.6166	1.7500e-003	1.5700e-003	61.1291
Total	**0.0234**	**0.0152**	**0.2071**	**6.0000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**60.6166**	**60.6166**	**1.7500e-003**	**1.5700e-003**	**61.1291**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0532	0.0178	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9826	22.9826	7.0000e-004	3.3400e-003	23.9941
Worker	2.9200e-003	1.9000e-003	0.0259	7.0000e-005	8.2100e-003	5.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5771	7.5771	2.2000e-004	2.0000e-004	7.6411
Total	**5.1500e-003**	**0.0551**	**0.0437**	**2.8000e-004**	**0.0150**	**6.3000e-004**	**0.0156**	**4.1300e-003**	**5.9000e-004**	**4.7200e-003**		**30.5596**	**30.5596**	**9.2000e-004**	**3.5400e-003**	**31.6353**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0532	0.0178	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9826	22.9826	7.0000e-004	3.3400e-003	23.9941
Worker	2.9200e-003	1.9000e-003	0.0259	7.0000e-005	8.2100e-003	5.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.5771	7.5771	2.2000e-004	2.0000e-004	7.6411
Total	**5.1500e-003**	**0.0551**	**0.0437**	**2.8000e-004**	**0.0150**	**6.3000e-004**	**0.0156**	**4.1300e-003**	**5.9000e-004**	**4.7200e-003**		**30.5596**	**30.5596**	**9.2000e-004**	**3.5400e-003**	**31.6353**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0429	0.0155	2.0000e-004	6.7700e-003	2.6000e-004	7.0300e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1047	22.1047	6.7000e-004	3.2000e-003	23.0752
Worker	2.7300e-003	1.7000e-003	0.0240	7.0000e-005	8.2100e-003	4.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.3366	7.3366	2.0000e-004	1.8000e-004	7.3961
Total	**3.9200e-003**	**0.0446**	**0.0395**	**2.7000e-004**	**0.0150**	**3.0000e-004**	**0.0153**	**4.1300e-003**	**2.9000e-004**	**4.4200e-003**		**29.4413**	**29.4413**	**8.7000e-004**	**3.3800e-003**	**30.4713**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0429	0.0155	2.0000e-004	6.7700e-003	2.6000e-004	7.0300e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1047	22.1047	6.7000e-004	3.2000e-003	23.0752
Worker	2.7300e-003	1.7000e-003	0.0240	7.0000e-005	8.2100e-003	4.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.3366	7.3366	2.0000e-004	1.8000e-004	7.3961
Total	**3.9200e-003**	**0.0446**	**0.0395**	**2.7000e-004**	**0.0150**	**3.0000e-004**	**0.0153**	**4.1300e-003**	**2.9000e-004**	**4.4200e-003**		**29.4413**	**29.4413**	**8.7000e-004**	**3.3800e-003**	**30.4713**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	**0.0492**	**0.0306**	**0.4320**	**1.3100e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**132.0595**	**132.0595**	**3.5800e-003**	**3.2900e-003**	**133.1300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	**0.0492**	**0.0306**	**0.4320**	**1.3100e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**132.0595**	**132.0595**	**3.5800e-003**	**3.2900e-003**	**133.1300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**4.1518**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**4.1518**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.2209	3,169.2209	0.3432	0.1978	3,236.7353
Unmitigated	3.4404	2.2997	19.2358	0.0311	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,169.2209	3,169.2209	0.3432	0.1978	3,236.7353

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,306.00	1,306.00	1306.00	700,544	700,544
Fast Food Restaurant w/o Drive Thru	446.00	446.00	446.00	719,205	719,205
Total	1,752.00	1,752.00	1,752.00	1,419,749	1,419,749

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Fast Food Restaurant w/o Drive Thru	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
NaturalGas Unmitigated	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Convenience Market with Gas Pumps	18.3804	2.0000e-004	1.8000e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1624	2.1624	4.0000e-005	4.0000e-005	2.1753
Fast Food Restaurant w/o Drive Thru	595.959	6.4300e-003	0.0584	0.0491	3.5000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003		70.1128	70.1128	1.3400e-003	1.2900e-003	70.5295
Total		**6.6300e-003**	**0.0602**	**0.0506**	**3.6000e-004**		**4.5800e-003**	**4.5800e-003**		**4.5800e-003**	**4.5800e-003**		**72.2752**	**72.2752**	**1.3800e-003**	**1.3300e-003**	**72.7047**

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					
Convenience Market with Gas Pumps	0.0183804	2.0000e-004	1.8000e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1624	2.1624	4.0000e-005	4.0000e-005	2.1753
Fast Food Restaurant w/o Drive Thru	0.595959	6.4300e-003	0.0584	0.0491	3.5000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003		70.1128	70.1128	1.3400e-003	1.2900e-003	70.5295
Total		**6.6300e-003**	**0.0602**	**0.0506**	**3.6000e-004**		**4.5800e-003**	**4.5800e-003**		**4.5800e-003**	**4.5800e-003**		**72.2752**	**72.2752**	**1.3800e-003**	**1.3300e-003**	**72.7047**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Unmitigated	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.4200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Total	**0.0970**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.7800e-003**	**3.7800e-003**	**1.0000e-005**		**4.0200e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.4200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Total	**0.0970**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.7800e-003**	**3.7800e-003**	**1.0000e-005**		**4.0200e-003**

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 Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

6 Carat Convenience Store and Restaurant - San Diego Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6 Carat Convenience Store and Restaurant

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant w/o Drive Thru	1.25	1000sqft	0.03	1,250.00	0
Convenience Market with Gas Pumps	16.00	Pump	0.05	3,022.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
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 - Convenience store size 3,022 SF

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100
g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 446 trips/day for fast food, 1306 trips/day for fueling station w/ c-store.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	3,022.00
tblVehicleTrips	ST_TR	322.50	81.63
tblVehicleTrips	ST_TR	696.00	356.80
tblVehicleTrips	SU_TR	322.50	81.63
tblVehicleTrips	SU_TR	500.00	356.80
tblVehicleTrips	WD_TR	322.50	81.63
tblVehicleTrips	WD_TR	346.23	356.80

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					
2022	1.1084	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.0955	1,422.0955	0.4433	3.5500e-003	1,433.6843
2023	4.1518	6.4652	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,160.8888	1,160.8888	0.3581	3.5600e-003	1,169.5904
Maximum	**4.1518**	**12.0217**	**7.7148**	**0.0147**	**5.3777**	**0.5177**	**5.8953**	**2.5860**	**0.4762**	**3.0622**	**0.0000**	**1,422.0955**	**1,422.0955**	**0.4433**	**3.5600e-003**	**1,433.6843**

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					
2022	1.1084	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.0955	1,422.0955	0.4433	3.5500e-003	1,433.6843
2023	4.1518	6.4652	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2949	0.2991	0.0000	1,160.8888	1,160.8888	0.3581	3.5600e-003	1,169.5904
Maximum	**4.1518**	**12.0217**	**7.7148**	**0.0147**	**2.1374**	**0.5177**	**2.6550**	**1.0192**	**0.4762**	**1.4954**	**0.0000**	**1,422.0955**	**1,422.0955**	**0.4433**	**3.5600e-003**	**1,433.6843**

6 Carat Convenience Store and Restaurant - San Diego Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	58.64	0.00	51.37	59.68	0.00	46.61	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 Not 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	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Energy	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
Mobile	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.3454	3,042.3454	0.3820	0.2111	3,114.8098
Total	**3.3821**	**2.5726**	**21.1910**	**0.0302**	**2.9888**	**0.0319**	**3.0207**	**0.7962**	**0.0300**	**0.8262**		**3,114.6244**	**3,114.6244**	**0.3834**	**0.2125**	**3,187.5185**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Energy	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
Mobile	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.3454	3,042.3454	0.3820	0.2111	3,114.8098
Total	**3.3821**	**2.5726**	**21.1910**	**0.0302**	**2.9888**	**0.0319**	**3.0207**	**0.7962**	**0.0300**	**0.8262**		**3,114.6244**	**3,114.6244**	**0.3834**	**0.2125**	**3,187.5185**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,408; Non-Residential Outdoor: 2,136; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	1.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**		**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0316**	**0.0214**	**0.2455**	**7.1000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**71.5946**	**71.5946**	**2.3300e-003**	**2.1300e-003**	**72.2866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**	**0.0000**	**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0316**	**0.0214**	**0.2455**	**7.1000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**71.5946**	**71.5946**	**2.3300e-003**	**2.1300e-003**	**72.2866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0107	0.1228	3.5000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		35.7973	35.7973	1.1600e-003	1.0600e-003	36.1433
Total	**0.0158**	**0.0107**	**0.1228**	**3.5000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**35.7973**	**35.7973**	**1.1600e-003**	**1.0600e-003**	**36.1433**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2068**	**0.2573**	**0.4641**	**0.0223**	**0.2367**	**0.2591**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0107	0.1228	3.5000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		35.7973	35.7973	1.1600e-003	1.0600e-003	36.1433
Total	**0.0158**	**0.0107**	**0.1228**	**3.5000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**35.7973**	**35.7973**	**1.1600e-003**	**1.0600e-003**	**36.1433**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0253	0.0171	0.1964	5.7000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		57.2757	57.2757	1.8600e-003	1.7000e-003	57.8293
Total	**0.0253**	**0.0171**	**0.1964**	**5.7000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**57.2757**	**57.2757**	**1.8600e-003**	**1.7000e-003**	**57.8293**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.0717**	**0.5173**	**2.5889**	**1.0017**	**0.4759**	**1.4776**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0253	0.0171	0.1964	5.7000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		57.2757	57.2757	1.8600e-003	1.7000e-003	57.8293
Total	**0.0253**	**0.0171**	**0.1964**	**5.7000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**57.2757**	**57.2757**	**1.8600e-003**	**1.7000e-003**	**57.8293**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0552	0.0183	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9944	22.9944	7.0000e-004	3.3400e-003	24.0073
Worker	3.1600e-003	2.1400e-003	0.0246	7.0000e-005	8.2100e-003	5.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.1595	7.1595	2.3000e-004	2.1000e-004	7.2287
Total	**5.3700e-003**	**0.0573**	**0.0429**	**2.8000e-004**	**0.0150**	**6.3000e-004**	**0.0156**	**4.1300e-003**	**5.9000e-004**	**4.7200e-003**		**30.1538**	**30.1538**	**9.3000e-004**	**3.5500e-003**	**31.2359**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0552	0.0183	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9944	22.9944	7.0000e-004	3.3400e-003	24.0073
Worker	3.1600e-003	2.1400e-003	0.0246	7.0000e-005	8.2100e-003	5.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		7.1595	7.1595	2.3000e-004	2.1000e-004	7.2287
Total	**5.3700e-003**	**0.0573**	**0.0429**	**2.8000e-004**	**0.0150**	**6.3000e-004**	**0.0156**	**4.1300e-003**	**5.9000e-004**	**4.7200e-003**		**30.1538**	**30.1538**	**9.3000e-004**	**3.5500e-003**	**31.2359**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0447	0.0159	2.1000e-004	6.7700e-003	2.6000e-004	7.0400e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1361	22.1361	6.7000e-004	3.2100e-003	23.1088
Worker	2.9600e-003	1.9100e-003	0.0228	7.0000e-005	8.2100e-003	4.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.9334	6.9334	2.1000e-004	2.0000e-004	6.9976
Total	**4.1200e-003**	**0.0466**	**0.0387**	**2.8000e-004**	**0.0150**	**3.0000e-004**	**0.0153**	**4.1300e-003**	**2.9000e-004**	**4.4200e-003**		**29.0695**	**29.0695**	**8.8000e-004**	**3.4100e-003**	**30.1064**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0447	0.0159	2.1000e-004	6.7700e-003	2.6000e-004	7.0400e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1361	22.1361	6.7000e-004	3.2100e-003	23.1088
Worker	2.9600e-003	1.9100e-003	0.0228	7.0000e-005	8.2100e-003	4.0000e-005	8.2600e-003	2.1800e-003	4.0000e-005	2.2200e-003		6.9334	6.9334	2.1000e-004	2.0000e-004	6.9976
Total	**4.1200e-003**	**0.0466**	**0.0387**	**2.8000e-004**	**0.0150**	**3.0000e-004**	**0.0153**	**4.1300e-003**	**2.9000e-004**	**4.4200e-003**		**29.0695**	**29.0695**	**8.8000e-004**	**3.4100e-003**	**30.1064**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**4.1518**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

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

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9601					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**4.1518**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.3454	3,042.3454	0.3820	0.2111	3,114.8098
Unmitigated	3.2784	2.5123	21.1386	0.0299	2.9888	0.0273	3.0161	0.7962	0.0254	0.8216		3,042.3454	3,042.3454	0.3820	0.2111	3,114.8098

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,306.00	1,306.00	1306.00	700,544	700,544
Fast Food Restaurant w/o Drive Thru	446.00	446.00	446.00	719,205	719,205
Total	1,752.00	1,752.00	1,752.00	1,419,749	1,419,749

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	9.50	7.30	7.30	1.50	79.50	19.00	51	37	12

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Fast Food Restaurant w/o Drive Thru	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047
NaturalGas Unmitigated	6.6300e-003	0.0602	0.0506	3.6000e-004		4.5800e-003	4.5800e-003		4.5800e-003	4.5800e-003		72.2752	72.2752	1.3900e-003	1.3300e-003	72.7047

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					
Convenience Market with Gas Pumps	18.3804	2.0000e-004	1.8000e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1624	2.1624	4.0000e-005	4.0000e-005	2.1753
Fast Food Restaurant w/o Drive Thru	595.959	6.4300e-003	0.0584	0.0491	3.5000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003		70.1128	70.1128	1.3400e-003	1.2900e-003	70.5295
Total		**6.6300e-003**	**0.0602**	**0.0506**	**3.6000e-004**		**4.5800e-003**	**4.5800e-003**		**4.5800e-003**	**4.5800e-003**		**72.2752**	**72.2752**	**1.3800e-003**	**1.3300e-003**	**72.7047**

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					
Convenience Market with Gas Pumps	0.0183804	2.0000e-004	1.8000e-003	1.5100e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1624	2.1624	4.0000e-005	4.0000e-005	2.1753
Fast Food Restaurant w/o Drive Thru	0.595959	6.4300e-003	0.0584	0.0491	3.5000e-004		4.4400e-003	4.4400e-003		4.4400e-003	4.4400e-003		70.1128	70.1128	1.3400e-003	1.2900e-003	70.5295
Total		**6.6300e-003**	**0.0602**	**0.0506**	**3.6000e-004**		**4.5800e-003**	**4.5800e-003**		**4.5800e-003**	**4.5800e-003**		**72.2752**	**72.2752**	**1.3800e-003**	**1.3300e-003**	**72.7047**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Unmitigated	0.0970	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.4200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Total	**0.0970**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.7800e-003**	**3.7800e-003**	**1.0000e-005**		**4.0200e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	5.4200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6000e-004	2.0000e-005	1.7600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.7800e-003	3.7800e-003	1.0000e-005		4.0200e-003
Total	**0.0970**	**2.0000e-005**	**1.7600e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**3.7800e-003**	**3.7800e-003**	**1.0000e-005**		**4.0200e-003**

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 Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6 Carat Convenience Store and Car Wash

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	16.00	Pump	0.05	4,257.00	0
Automobile Care Center	3.30	1000sqft	0.08	3,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
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 - Convenience store size 4,257 SF.

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100
g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 1215 trips/day for fueling station w/ c-store and car wash.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	4,257.00
tblVehicleTrips	ST_TR	322.50	75.94
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	SU_TR	322.50	75.94
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	WD_TR	322.50	75.94
tblVehicleTrips	WD_TR	23.72	0.00

2.0 Emissions Summary

6 Carat Convenience Store and Car Wash - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					
2022	1.1065	12.0198	7.7283	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,425.4364	1,425.4364	0.4432	3.7300e-003	1,436.9842
2023	7.1975	6.4649	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,168.1473	1,168.1473	0.3583	3.5700e-003	1,176.7631
Maximum	**7.1975**	**12.0198**	**7.7283**	**0.0147**	**5.3777**	**0.5177**	**5.8953**	**2.5860**	**0.4762**	**3.0622**	**0.0000**	**1,425.4364**	**1,425.4364**	**0.4432**	**3.7300e-003**	**1,436.9842**

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					
2022	1.1065	12.0198	7.7283	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,425.4364	1,425.4364	0.4432	3.7300e-003	1,436.9842
2023	7.1975	6.4649	7.4529	0.0126	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,168.1473	1,168.1473	0.3583	3.5700e-003	1,176.7631
Maximum	**7.1975**	**12.0198**	**7.7283**	**0.0147**	**2.1374**	**0.5177**	**2.6550**	**1.0192**	**0.4762**	**1.4954**	**0.0000**	**1,425.4364**	**1,425.4364**	**0.4432**	**3.7300e-003**	**1,436.9842**

6 Carat Convenience Store and Car Wash - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	58.64	0.00	51.37	59.68	0.00	46.58	0.00	0.00	0.00	0.00	0.00	0.00

6 Carat Convenience Store and Car Wash - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Energy	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
Mobile	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.2388	1,513.2388	0.2046	0.1142	1,552.3768
Total	**2.3894**	**1.3145**	**10.7258**	**0.0149**	**1.3720**	**0.0152**	**1.3872**	**0.3655**	**0.0142**	**0.3797**		**1,528.5424**	**1,528.5424**	**0.2049**	**0.1145**	**1,567.7716**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Energy	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
Mobile	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.2388	1,513.2388	0.2046	0.1142	1,552.3768
Total	**2.3894**	**1.3145**	**10.7258**	**0.0149**	**1.3720**	**0.0152**	**1.3872**	**0.3655**	**0.0142**	**0.3797**		**1,528.5424**	**1,528.5424**	**0.2049**	**0.1145**	**1,567.7716**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,336; Non-Residential Outdoor: 3,779; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**		**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0292**	**0.0190**	**0.2589**	**7.5000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**75.7708**	**75.7708**	**2.1900e-003**	**1.9700e-003**	**76.4114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**	**0.0000**	**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2589	7.5000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		75.7708	75.7708	2.1900e-003	1.9700e-003	76.4114
Total	**0.0292**	**0.0190**	**0.2589**	**7.5000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**75.7708**	**75.7708**	**2.1900e-003**	**1.9700e-003**	**76.4114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0146	9.5000e-003	0.1295	3.7000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		37.8854	37.8854	1.0900e-003	9.8000e-004	38.2057
Total	**0.0146**	**9.5000e-003**	**0.1295**	**3.7000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**37.8854**	**37.8854**	**1.0900e-003**	**9.8000e-004**	**38.2057**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2068**	**0.2573**	**0.4641**	**0.0223**	**0.2367**	**0.2591**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0146	9.5000e-003	0.1295	3.7000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		37.8854	37.8854	1.0900e-003	9.8000e-004	38.2057
Total	**0.0146**	**9.5000e-003**	**0.1295**	**3.7000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**37.8854**	**37.8854**	**1.0900e-003**	**9.8000e-004**	**38.2057**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2071	6.0000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		60.6166	60.6166	1.7500e-003	1.5700e-003	61.1291
Total	**0.0234**	**0.0152**	**0.2071**	**6.0000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**60.6166**	**60.6166**	**1.7500e-003**	**1.5700e-003**	**61.1291**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.0717**	**0.5173**	**2.5889**	**1.0017**	**0.4759**	**1.4776**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2071	6.0000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		60.6166	60.6166	1.7500e-003	1.5700e-003	61.1291
Total	**0.0234**	**0.0152**	**0.2071**	**6.0000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**60.6166**	**60.6166**	**1.7500e-003**	**1.5700e-003**	**61.1291**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0532	0.0178	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9826	22.9826	7.0000e-004	3.3400e-003	23.9941
Worker	5.8400e-003	3.8000e-003	0.0518	1.5000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	9.0000e-005	4.4400e-003		15.1542	15.1542	4.4000e-004	3.9000e-004	15.2823
Total	**8.0700e-003**	**0.0570**	**0.0696**	**3.6000e-004**	**0.0232**	**6.7000e-004**	**0.0239**	**6.3100e-003**	**6.4000e-004**	**6.9400e-003**		**38.1367**	**38.1367**	**1.1400e-003**	**3.7300e-003**	**39.2764**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2300e-003	0.0532	0.0178	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9826	22.9826	7.0000e-004	3.3400e-003	23.9941
Worker	5.8400e-003	3.8000e-003	0.0518	1.5000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	9.0000e-005	4.4400e-003		15.1542	15.1542	4.4000e-004	3.9000e-004	15.2823
Total	**8.0700e-003**	**0.0570**	**0.0696**	**3.6000e-004**	**0.0232**	**6.7000e-004**	**0.0239**	**6.3100e-003**	**6.4000e-004**	**6.9400e-003**		**38.1367**	**38.1367**	**1.1400e-003**	**3.7300e-003**	**39.2764**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0429	0.0155	2.0000e-004	6.7700e-003	2.6000e-004	7.0300e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1047	22.1047	6.7000e-004	3.2000e-003	23.0752
Worker	5.4700e-003	3.3900e-003	0.0480	1.5000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.6733	14.6733	4.0000e-004	3.7000e-004	14.7922
Total	**6.6600e-003**	**0.0463**	**0.0635**	**3.5000e-004**	**0.0232**	**3.5000e-004**	**0.0236**	**6.3100e-003**	**3.3000e-004**	**6.6400e-003**		**36.7780**	**36.7780**	**1.0700e-003**	**3.5700e-003**	**37.8675**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0429	0.0155	2.0000e-004	6.7700e-003	2.6000e-004	7.0300e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1047	22.1047	6.7000e-004	3.2000e-003	23.0752
Worker	5.4700e-003	3.3900e-003	0.0480	1.5000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.6733	14.6733	4.0000e-004	3.7000e-004	14.7922
Total	**6.6600e-003**	**0.0463**	**0.0635**	**3.5000e-004**	**0.0232**	**3.5000e-004**	**0.0236**	**6.3100e-003**	**3.3000e-004**	**6.6400e-003**		**36.7780**	**36.7780**	**1.0700e-003**	**3.5700e-003**	**37.8675**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	**0.0492**	**0.0306**	**0.4320**	**1.3100e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**132.0595**	**132.0595**	**3.5800e-003**	**3.2900e-003**	**133.1300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	**0.0492**	**0.0306**	**0.4320**	**1.3100e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**132.0595**	**132.0595**	**3.5800e-003**	**3.2900e-003**	**133.1300**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**7.1975**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**7.1975**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.2388	1,513.2388	0.2046	0.1142	1,552.3768
Unmitigated	2.2165	1.3017	10.7131	0.0149	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,513.2388	1,513.2388	0.2046	0.1142	1,552.3768

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,215.04	1,215.04	1215.04	651,753	651,753
Automobile Care Center	0.00	0.00	0.00		
Total	1,215.04	1,215.04	1,215.04	651,753	651,753

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Automobile Care Center	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
NaturalGas Unmitigated	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	104.153	1.1200e-003	0.0102	8.5800e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2533	12.2533	2.3000e-004	2.2000e-004	12.3262
Convenience Market with Gas Pumps	25.8919	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0461	3.0461	6.0000e-005	6.0000e-005	3.0642
Total		**1.4000e-003**	**0.0128**	**0.0107**	**8.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**		**15.2994**	**15.2994**	**2.9000e-004**	**2.8000e-004**	**15.3904**

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					
Automobile Care Center	0.104153	1.1200e-003	0.0102	8.5800e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2533	12.2533	2.3000e-004	2.2000e-004	12.3262
Convenience Market with Gas Pumps	0.0258919	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0461	3.0461	6.0000e-005	6.0000e-005	3.0642
Total		**1.4000e-003**	**0.0128**	**0.0107**	**8.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**		**15.2994**	**15.2994**	**2.9000e-004**	**2.8000e-004**	**15.3904**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Unmitigated	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	9.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Total	**0.1715**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.2200e-003**	**4.2200e-003**	**1.0000e-005**		**4.5000e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	9.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Total	**0.1715**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.2200e-003**	**4.2200e-003**	**1.0000e-005**		**4.5000e-003**

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 Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6 Carat Convenience Store and Car Wash

San Diego Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Convenience Market with Gas Pumps	16.00	Pump	0.05	4,257.00	0
Automobile Care Center	3.30	1000sqft	0.08	3,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
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 - Convenience store size 4,257 SF.

Architectural Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100
g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Vehicle Trips - Trip generation rates from Darnell & Associates, March 2022. 1215 trips/day for fueling station w/ c-store and car wash.

Area Coating - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Construction Off-road Equipment Mitigation -

Area Mitigation - Construction contractors shall use low-VOC paint (50 g/L for interior and exterior coatings for residential and non-residential buildings, and 100 g/L for parking lot paint) as required by SDAPCD Rule 67.0.1.

Waste Mitigation -

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblLandUse	LandUseSquareFeet	2,258.80	4,257.00
tblVehicleTrips	ST_TR	322.50	75.94
tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	SU_TR	322.50	75.94
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	WD_TR	322.50	75.94
tblVehicleTrips	WD_TR	23.72	0.00

2.0 Emissions Summary

6 Carat Convenience Store and Car Wash - San Diego Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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					
2022	1.1084	12.0217	7.7148	0.0147	5.3777	0.5177	5.8953	2.5860	0.4762	3.0622	0.0000	1,422.0955	1,422.0955	0.4433	3.7700e-003	1,433.6843
2023	7.1975	6.4671	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,160.8888	1,160.8888	0.3583	3.6100e-003	1,169.5904
Maximum	**7.1975**	**12.0217**	**7.7148**	**0.0147**	**5.3777**	**0.5177**	**5.8953**	**2.5860**	**0.4762**	**3.0622**	**0.0000**	**1,422.0955**	**1,422.0955**	**0.4433**	**3.7700e-003**	**1,433.6843**

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					
2022	1.1084	12.0217	7.7148	0.0147	2.1374	0.5177	2.6550	1.0192	0.4762	1.4954	0.0000	1,422.0955	1,422.0955	0.4433	3.7700e-003	1,433.6843
2023	7.1975	6.4671	7.4314	0.0125	0.1479	0.3206	0.4129	0.0392	0.2950	0.3013	0.0000	1,160.8888	1,160.8888	0.3583	3.6100e-003	1,169.5904
Maximum	**7.1975**	**12.0217**	**7.7148**	**0.0147**	**2.1374**	**0.5177**	**2.6550**	**1.0192**	**0.4762**	**1.4954**	**0.0000**	**1,422.0955**	**1,422.0955**	**0.4433**	**3.7700e-003**	**1,433.6843**

6 Carat Convenience Store and Car Wash - San Diego Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	58.64	0.00	51.37	59.68	0.00	46.58	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 Not 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	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Energy	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
Mobile	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.1143	1,456.1143	0.2314	0.1224	1,498.3769
Total	**2.2721**	**1.4389**	**12.1213**	**0.0144**	**1.3720**	**0.0152**	**1.3872**	**0.3655**	**0.0142**	**0.3797**		**1,471.4179**	**1,471.4179**	**0.2317**	**0.1227**	**1,513.7718**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Energy	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
Mobile	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.1143	1,456.1143	0.2314	0.1224	1,498.3769
Total	**2.2721**	**1.4389**	**12.1213**	**0.0144**	**1.3720**	**0.0152**	**1.3872**	**0.3655**	**0.0142**	**0.3797**		**1,471.4179**	**1,471.4179**	**0.2317**	**0.1227**	**1,513.7718**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	10/3/2022	10/14/2022	5	10	
2	Site Preparation	Site Preparation	10/15/2022	10/17/2022	5	1	
3	Grading	Grading	10/18/2022	10/19/2022	5	2	
4	Building Construction	Building Construction	10/20/2022	3/8/2023	5	100	
5	Paving	Paving	3/9/2023	3/15/2023	5	5	
6	Architectural Coating	Architectural Coating	3/16/2023	3/22/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,336; Non-Residential Outdoor: 3,779; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	2.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225		1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**		**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0316**	**0.0214**	**0.2455**	**7.1000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**71.5946**	**71.5946**	**2.3300e-003**	**2.1300e-003**	**72.2866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7094	6.4138	7.4693	0.0120		0.3375	0.3375		0.3225	0.3225	0.0000	1,147.9025	1,147.9025	0.2119		1,153.2001
Total	**0.7094**	**6.4138**	**7.4693**	**0.0120**		**0.3375**	**0.3375**		**0.3225**	**0.3225**	**0.0000**	**1,147.9025**	**1,147.9025**	**0.2119**		**1,153.2001**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0316	0.0214	0.2455	7.1000e-004	0.0822	4.6000e-004	0.0826	0.0218	4.3000e-004	0.0222		71.5946	71.5946	2.3300e-003	2.1300e-003	72.2866
Total	**0.0316**	**0.0214**	**0.2455**	**7.1000e-004**	**0.0822**	**4.6000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**71.5946**	**71.5946**	**2.3300e-003**	**2.1300e-003**	**72.2866**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0107	0.1228	3.5000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		35.7973	35.7973	1.1600e-003	1.0600e-003	36.1433
Total	**0.0158**	**0.0107**	**0.1228**	**3.5000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**35.7973**	**35.7973**	**1.1600e-003**	**1.0600e-003**	**36.1433**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2068	0.0000	0.2068	0.0223	0.0000	0.0223			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2068**	**0.2573**	**0.4641**	**0.0223**	**0.2367**	**0.2591**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0158	0.0107	0.1228	3.5000e-004	0.0411	2.3000e-004	0.0413	0.0109	2.1000e-004	0.0111		35.7973	35.7973	1.1600e-003	1.0600e-003	36.1433
Total	**0.0158**	**0.0107**	**0.1228**	**3.5000e-004**	**0.0411**	**2.3000e-004**	**0.0413**	**0.0109**	**2.1000e-004**	**0.0111**		**35.7973**	**35.7973**	**1.1600e-003**	**1.0600e-003**	**36.1433**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3119**	**0.5173**	**5.8292**	**2.5686**	**0.4759**	**3.0445**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0253	0.0171	0.1964	5.7000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		57.2757	57.2757	1.8600e-003	1.7000e-003	57.8293
Total	**0.0253**	**0.0171**	**0.1964**	**5.7000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**57.2757**	**57.2757**	**1.8600e-003**	**1.7000e-003**	**57.8293**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0717	0.0000	2.0717	1.0017	0.0000	1.0017			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.0717**	**0.5173**	**2.5889**	**1.0017**	**0.4759**	**1.4776**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0253	0.0171	0.1964	5.7000e-004	0.0657	3.7000e-004	0.0661	0.0174	3.4000e-004	0.0178		57.2757	57.2757	1.8600e-003	1.7000e-003	57.8293
Total	**0.0253**	**0.0171**	**0.1964**	**5.7000e-004**	**0.0657**	**3.7000e-004**	**0.0661**	**0.0174**	**3.4000e-004**	**0.0178**		**57.2757**	**57.2757**	**1.8600e-003**	**1.7000e-003**	**57.8293**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422		1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**		**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0552	0.0183	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9944	22.9944	7.0000e-004	3.3400e-003	24.0073
Worker	6.3100e-003	4.2700e-003	0.0491	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	9.0000e-005	4.4400e-003		14.3189	14.3189	4.7000e-004	4.3000e-004	14.4573
Total	**8.5200e-003**	**0.0595**	**0.0674**	**3.5000e-004**	**0.0232**	**6.7000e-004**	**0.0239**	**6.3100e-003**	**6.4000e-004**	**6.9400e-003**		**37.3133**	**37.3133**	**1.1700e-003**	**3.7700e-003**	**38.4646**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6863	7.0258	7.1527	0.0114		0.3719	0.3719		0.3422	0.3422	0.0000	1,103.9393	1,103.9393	0.3570		1,112.8652
Total	**0.6863**	**7.0258**	**7.1527**	**0.0114**		**0.3719**	**0.3719**		**0.3422**	**0.3422**	**0.0000**	**1,103.9393**	**1,103.9393**	**0.3570**		**1,112.8652**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2100e-003	0.0552	0.0183	2.1000e-004	6.7700e-003	5.8000e-004	7.3500e-003	1.9500e-003	5.5000e-004	2.5000e-003		22.9944	22.9944	7.0000e-004	3.3400e-003	24.0073
Worker	6.3100e-003	4.2700e-003	0.0491	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	9.0000e-005	4.4400e-003		14.3189	14.3189	4.7000e-004	4.3000e-004	14.4573
Total	**8.5200e-003**	**0.0595**	**0.0674**	**3.5000e-004**	**0.0232**	**6.7000e-004**	**0.0239**	**6.3100e-003**	**6.4000e-004**	**6.9400e-003**		**37.3133**	**37.3133**	**1.1700e-003**	**3.7700e-003**	**38.4646**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0447	0.0159	2.1000e-004	6.7700e-003	2.6000e-004	7.0400e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1361	22.1361	6.7000e-004	3.2100e-003	23.1088
Worker	5.9300e-003	3.8200e-003	0.0456	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.8668	13.8668	4.2000e-004	4.0000e-004	13.9953
Total	**7.0900e-003**	**0.0485**	**0.0615**	**3.5000e-004**	**0.0232**	**3.5000e-004**	**0.0236**	**6.3100e-003**	**3.3000e-004**	**6.6400e-003**		**36.0029**	**36.0029**	**1.0900e-003**	**3.6100e-003**	**37.1041**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1600e-003	0.0447	0.0159	2.1000e-004	6.7700e-003	2.6000e-004	7.0400e-003	1.9500e-003	2.5000e-004	2.2000e-003		22.1361	22.1361	6.7000e-004	3.2100e-003	23.1088
Worker	5.9300e-003	3.8200e-003	0.0456	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.8668	13.8668	4.2000e-004	4.0000e-004	13.9953
Total	**7.0900e-003**	**0.0485**	**0.0615**	**3.5000e-004**	**0.0232**	**3.5000e-004**	**0.0236**	**6.3100e-003**	**3.3000e-004**	**6.6400e-003**		**36.0029**	**36.0029**	**1.0900e-003**	**3.6100e-003**	**37.1041**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6112**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	**0.0533**	**0.0344**	**0.4105**	**1.2300e-003**	**0.1479**	**7.9000e-004**	**0.1487**	**0.0392**	**7.3000e-004**	**0.0400**		**124.8010**	**124.8010**	**3.8100e-003**	**3.5600e-003**	**125.9573**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**7.1975**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.0058					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**7.1975**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.1143	1,456.1143	0.2314	0.1224	1,498.3769
Unmitigated	2.0992	1.4261	12.1086	0.0143	1.3720	0.0142	1.3862	0.3655	0.0132	0.3787		1,456.1143	1,456.1143	0.2314	0.1224	1,498.3769

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market with Gas Pumps	1,215.04	1,215.04	1215.04	651,753	651,753
Automobile Care Center	0.00	0.00	0.00		
Total	1,215.04	1,215.04	1,215.04	651,753	651,753

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
Convenience Market with Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market with Gas Pumps	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164
Automobile Care Center	0.553514	0.062792	0.181046	0.120736	0.024419	0.006214	0.008493	0.006184	0.000715	0.000556	0.029185	0.000982	0.005164

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904
NaturalGas Unmitigated	1.4000e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004		15.2995	15.2995	2.9000e-004	2.8000e-004	15.3904

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					
Automobile Care Center	104.153	1.1200e-003	0.0102	8.5800e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2533	12.2533	2.3000e-004	2.2000e-004	12.3262
Convenience Market with Gas Pumps	25.8919	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0461	3.0461	6.0000e-005	6.0000e-005	3.0642
Total		**1.4000e-003**	**0.0128**	**0.0107**	**8.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**		**15.2994**	**15.2994**	**2.9000e-004**	**2.8000e-004**	**15.3904**

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					
Automobile Care Center	0.104153	1.1200e-003	0.0102	8.5800e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.2533	12.2533	2.3000e-004	2.2000e-004	12.3262
Convenience Market with Gas Pumps	0.0258919	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0461	3.0461	6.0000e-005	6.0000e-005	3.0642
Total		**1.4000e-003**	**0.0128**	**0.0107**	**8.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**		**15.2994**	**15.2994**	**2.9000e-004**	**2.8000e-004**	**15.3904**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Unmitigated	0.1715	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	9.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Total	**0.1715**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.2200e-003**	**4.2200e-003**	**1.0000e-005**		**4.5000e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	9.6000e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1617					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.2200e-003	4.2200e-003	1.0000e-005		4.5000e-003
Total	**0.1715**	**2.0000e-005**	**1.9700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.2200e-003**	**4.2200e-003**	**1.0000e-005**		**4.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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