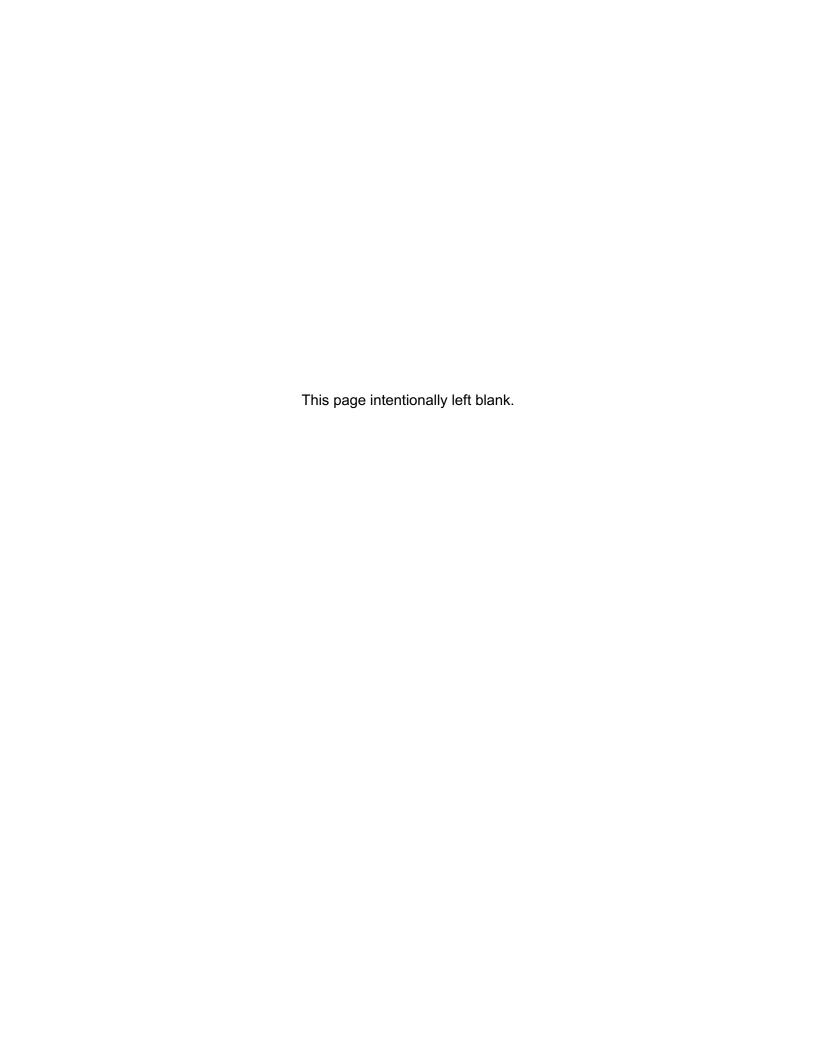
# **Appendix B**

**Air Quality Report** 



# JERSEY INDUSTRIAL COMPLEX PROJECT RANCHO CUCAMONGA, CALIFORNIA

## AIR QUALITY/GREENHOUSE GAS STUDY

#### **Prepared for:**

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Prepared by:



August 2021

# JERSEY INDUSTRIAL COMPLEX PROJECT RANCHO CUCAMONGA, CALIFORNIA

### AIR QUALITY and GREENHOUSE GAS STUDY

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#### Appendices

Appendix A CalEEMod Air Quality and Greenhouse Gas Emissions Model Results – Summer/Annual, and  $N_2O$  from Mobile Emissions Sources

# JERSEY INDUSTRIAL COMPLEX PROJECT RANCHO CUCAMONGA, CALIFORNIA

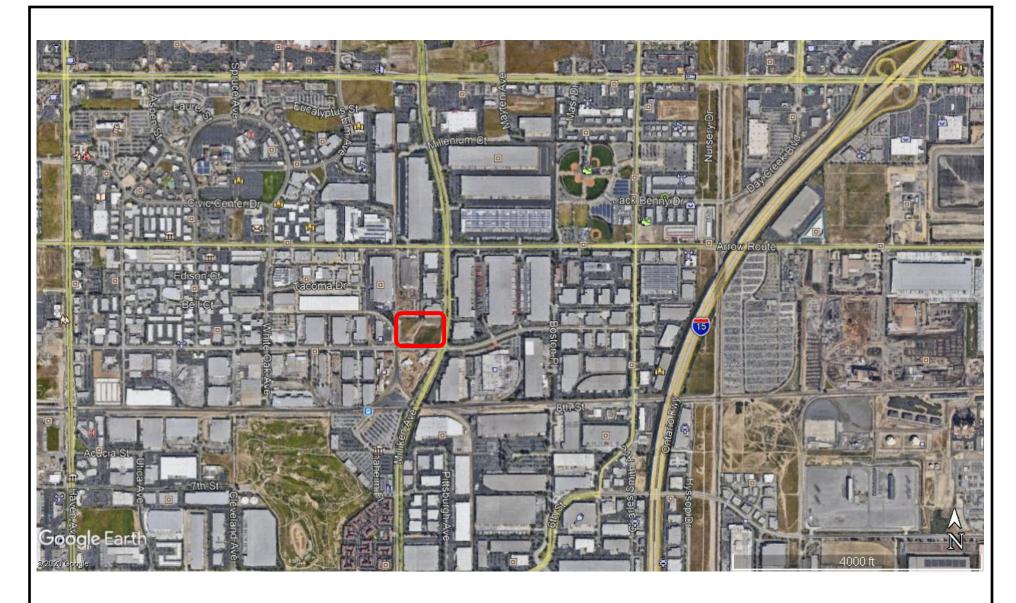
#### AIR QUALITY and GREENHOUSE GAS STUDY

This report is an analysis of the potential air quality and greenhouse gas impacts associated with the proposed construction and operation of the Jersey Industrial Complex in the City of Rancho Cucamonga, California. This report has been prepared by Birdseye Planning Group (BPG) under contract to the project applicant to support preparation of the environmental documentation pursuant to the California Environmental Quality Act (CEQA). This study analyzes the potential for temporary impacts associated with construction activity and long-term impacts associated with operation of the proposed project.

#### PROJECT DESCRIPTION

The project would construct and operate a new warehouse/storage building with offices and related improvements on a vacant site located at 11298 Jersey Boulevard in the City of Rancho Cucamonga. The site is located at the northwest corner of Milliken Avenue and Jersey Boulevard (APN 229-111-60). The site is 7.39 acres in size and zoned Medium Impact/Heavy Industrial. Thus, the project is subject to standards and policies within the City of Rancho Cucamonga Municipal Code for that zoning designation. The project site has not been developed. However, debris piles are located on the site. The site has been fully remediated to remove slag fill that was identified on the site as part of a Phase I Environmental Site Assessment performed in December 2002.

The project would provide a new warehouse building with 143,014 square feet of storage in four separate units, 8,127 square feet of mezzanine storage, 8,127 square feet of office space (i.e., divided into four separate spaces, one for each storage unit) and a 312-square foot electrical room. The total building area would be 159,580 square feet. These would be the architectural parapets on the building frontage. A total of 110 parking spaces would be provided. The building would be oriented east/west with vehicle access to office space fronting the building from Jersey Boulevard. Truck access to the loading docks located at the rear of the building would be provided from Milliken Avenue. The truck access driveway would be gated with security cameras and monitored to ensure no unauthorized entrance to the loading area. The project would provide four warehouse storage units, each with four truck loading docks (i.e., 16 total docks). Water/sewer and other utilities would be provided via existing infrastructure located on-site or within the adjacent roadway corridor. Any cut and fill required during grading would be balanced on-site. No off-site import or export of soil material would be needed. The warehouse is expected to receive and ship non-perishable products from early morning to evening hours seven days a week. No cold storage would be provided. The office personnel would work during typical daytime office hours. Construction of the proposed project would begin in mid-2022 and be completed in mid-2023. The project site is shown in Figure 1. The proposed site plan is shown in Figure 2.



## FIGURE 1—Vicinity Map



- Project Site

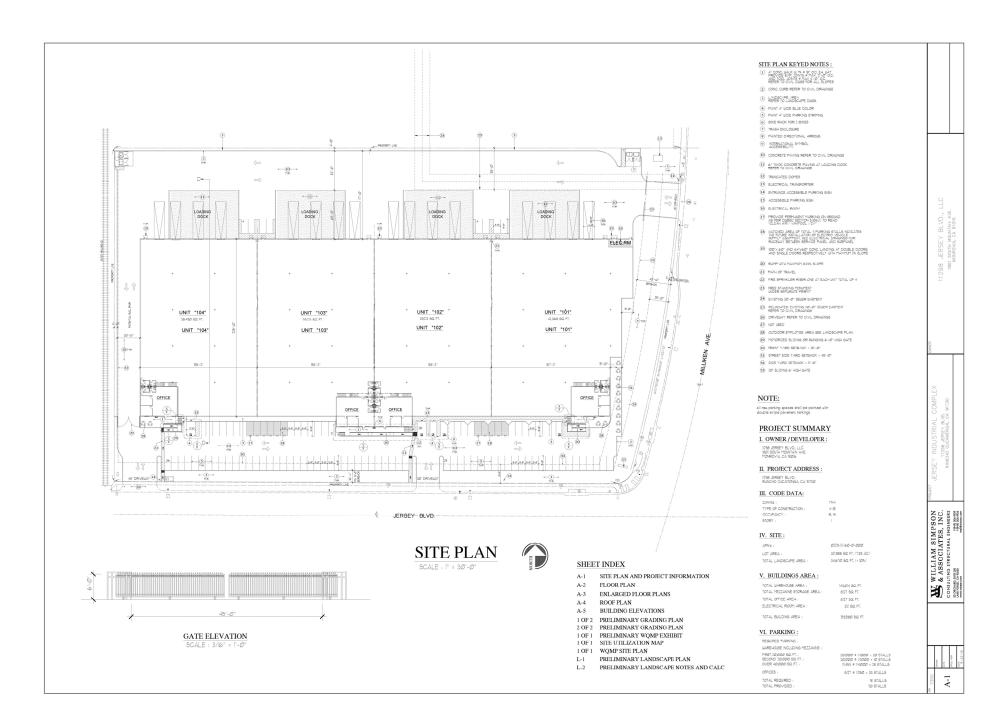


Figure 2— Site Plan

#### **SETTING**

#### Air Pollution Regulation

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards for the protection of public health. The EPA is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the state equivalent in California. Federal and state standards have been established for six criteria pollutants, including ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulates less than 10 and 2.5 microns in diameter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead (Pb). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 1 lists the current federal and state standards for each of these pollutants. Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO. The federal, state and location regulations that pertain to air pollutants are summarized below.

**Table 1 Ambient Air Quality Standards** 

DOLL UT A NIT	AVERAGE	CALIFORNIA	A STANDARDS <sup>1</sup>	NATIONAL STANDARDS <sup>2</sup>				
POLLUTANT	TIME	Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3, 5</sup>	Secondary <sup>3, 6</sup>	Method <sup>7</sup>		
Ozone <sup>8</sup>	1 hour	0.09 ppm (180 μg/m³)	Ultraviolet		Same as	Ultraviolet		
(O <sub>3</sub> )	8 hours	0.070 ppm (137μg/m³)	Photometry	0.070 ppm (137 μg/m³)	Primary Standard	Photometry		
Carbon Monoxide	8 hours	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared	9 ppm (10 mg/m³)		Non-Dispersive Infrared		
(CO)	1 hour	20 ppm (23 mg/m³)	Spectroscopy (NDIR)	35 ppm (40 mg/m³)		Spectroscopy (NDIR)		
Nitrogen Dioxide	Annual Average	0.030 ppm (57 μg/m³)	Gas Phase Chemiluminescen	0.053 ppm (100 μg/m³)	Same as Primary Standard	Gas Phase		
(NO <sub>2</sub> ) <sup>10</sup>	1 hour	0.18 ppm (339 μg/m³)	ce	100 ppb (188 μg/m³)		Chemiluminescence		
	Annual Average			0.03 ppm (80 μg/m³)				
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	24 hours	0.04 ppm (105 μg/m³)	Ultraviolet	0.14 ppm (365 μg/m³)		Pararosaniline		
	3 hours		Fluorescence		0.5 ppm (1300 μg/m³)	i ararosamine		
	1 hour	0.25 ppm (655 μg/m³)		75 ppb (196 μg/m³)				

DOLLUTANT	AVERAGE	CALIFORNIA	A STANDARDS <sup>1</sup>	NATIONAL STANDARDS <sup>2</sup>				
POLLUTANT	TIME	Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3, 5</sup>	Secondary <sup>3, 6</sup>	Method <sup>7</sup>		
Respirable	24 hours	50 μg/m³		150 μg/m <sup>3</sup>	150 μg/m <sup>3</sup>	Inertial Separation		
Particulate Matter (PM10)9	Annual Arithmetic Mean	20 μg/m³	Gravimetric or Beta Attenuation	1		and Gravimetric Analysis		
Fine Particulate	Annual Arithmetic Mean	12 μg/m³	Gravimetric or	12 μg/m³	15 μg/m³	Inertial Separation and Gravimetric		
Matter (PM <sub>2.5</sub> ) <sup>9</sup>	24 hours		Beta Attenuation	35 μg/m³	Same as Primary Standard	Analysis		
Sulfates	24 hours	25 μg/m³	Ion Chromatography	1				
	30-day Average	1.5 μg/m³						
Lead <sup>12, 13</sup> (Pb)	Calendar Quarter		Atomic Absorption	1.5 μg/m³	Same as	High Volume Sampler and Atomic		
(TD)	3-month Rolling Average		1	0.15 μg/m³	Primary Standard	Absorption		
Hydrogen Sulfide (H <sub>2</sub> S)	1 hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence					
Vinyl Chloride <sup>12</sup>	24 hours	0.010 ppm (26 μg/m³)	Gas Chromatography					

#### Notes:

ppm = parts per million

 $\mu g/m^3 = micrograms per cubic meter$ 

 $mg/m^3 = milligrams$  per cubic meter

Source: California Air Resources Board 2017

- 1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM<sub>2.5</sub>, 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 CARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9. On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15  $\mu$ g/ m³ to 12.0  $\mu$ g/ m³. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35  $\mu$ g/ m³, as was the annual secondary standard of 15  $\mu$ g/ m³. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150  $\mu$ g/ m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 11. On June 2, 2010, a new 1-hour SO<sub>2</sub> 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<sub>2</sub> 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 CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5  $\mu$ g/ m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

#### **Federal Regulations**

The U.S. Environmental Protection Agency (USEPA) regulates emissions sources such as aircraft, ships, and certain locomotives. The USEPA's air quality mandates are drawn primarily from the Clean Air Act (CAA), which was first enacted in 1955 and subsequently amended; Congress's most recent major amendments were in 1990. The CAA established National

Ambient Air Quality Standards (NAAQS). These standards identify air quality levels for criteria pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe (with an adequate margin of safety) to protect the public health and welfare. As part of its enforcement responsibilities, the USEPA requires each State with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that includes pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attaining and incorporating additional sanctions for failure to attain or meet interim milestones. The CAA sections most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O3, NO2, SO2, PM10, CO, PM2.5, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O3 and to adopt a NAAQS for PM2.5. As stated,

The Basin, in which the project area is located, is a non-attainment area for both the federal and state standards for ozone and PM<sub>2.5</sub>. The Basin is in attainment for the state and federal standards for PM<sub>10</sub>, nitrogen dioxide, and carbon monoxide.

#### **State Regulations**

#### California Environmental Protection Agency

The mission of the California Environmental Protection Agency (CalEPA) is to restore, protect, and enhance the environment, to ensure public health, environmental quality, and economic vitality. This is accomplished by developing, implementing, and enforcing environmental laws that regulate air, water, and soil quality, pesticide use, and waste recycling and reduction. Relevant to air quality, the California Environmental Protection Agency (CalEPA) consists of the California Air Resources Board (CARB) and the Office Environmental Health Hazard Assessment (OEHHA). In 2012, the Legislature passed Senate Bill (SB) 535, which targets disadvantaged communities in California for the investment of proceeds from the State's capand-trade program to improve public health, quality of life, and economic opportunity in California's most burdened communities, while also reducing pollution. SB 535 directed that 25% of the Greenhouse Gas Reduction Fund's proceeds go to projects that provide a benefit to disadvantaged communities. The legislation gave CalEPA responsibility for identifying those communities. In 2016, the Legislature passed Assembly Bill (AB) 1550, which now requires that 25% of proceeds from the fund be spent on projects located in disadvantaged communities. CalEPA has prepared a list of disadvantaged communities for the purpose of SB 535 and CalEnviroScreen is a general mapping tool developed by OEHHA to help identify California communities that are most affected by sources of pollution.

#### California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for ensuring implementation of the California Clean Air Act

(CCAA) (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates the achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources to attain the state ambient air quality standards by the earliest practical date. CARB established the California Ambient Air Quality Standards (CAAQS) for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO4, visibility, hydrogen sulfide (H2S), and vinyl chloride (C2H3Cl). However, at this time, H2S and C2H3Cl are not measured at any monitoring stations in the South Coast Air Basin (SCAB) because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (as shown in Table 4.2-1).

#### Community Air Protection Program

In response to AB 617 (2017), which addresses criteria air pollutants and TACs from sources other than vehicles, CARB established the Community Air Protection Program (CAPP). The CAPP's focus is to reduce exposure in communities most impacted by air pollution. This Statewide effort includes community air monitoring and community emissions reduction programs. In addition, the Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities and grants to support community participation in the CAPP process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data, which will help advance air pollution control efforts throughout the State. This new effort provides an opportunity to continue to enhance air quality planning efforts and better integrate community, regional, and State level programs to provide clean air for all Californians.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen), is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2009, and is administered by the California Building Standards Commission (CBSC). The CBSC updates the CALGreen program regularly, with the most recent approved update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020.

Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2019 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption in the SCAB and across the State of California. For example, the 2019 Title 24 standards require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand-responsive technologies for residential buildings, and update indoor and outdoor lighting requirements for nonresidential

buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7% less energy compared to the residential homes built under the 2016 standards. Additionally, after the implementation of solar photovoltaic systems, homes built under the 2019 standards will use about 53% less energy than homes built under the 2016 standards. Nonresidential buildings (such as the Project) will use approximately 30% less energy due to lighting upgrade requirements.

#### **Regional Regulations**

Southern California Association of Governments

On September 3, 2020, SCAG's Regional Council unanimously voted to approve and fully adopt Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy), and the addendum to the Connect SoCal Program Environmental Impact Report.

Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern California residents within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

#### South Coast Air Quality Management District

The Project is in the City of Rancho Cucamonga, in the South Coast Air Basin (SCAB), where the South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control. As a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all applicable federal and State government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines when necessary. SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of air quality management plans (AQMPs).

#### SCAQMD Rules

There are numerous requirements that development and redevelopment projects must comply with by law. They were put in place by federal, State, and local regulatory agencies to improve air quality.

SCAQMD Rule 402, Nuisance, states that a project 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.

SCAQMD Rule 403, Fugitive Dust, is intended to reduce the amount of particulate matter entrained in the ambient air due to anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earthmoving and grading activities.

SCAQMD Rule 1113 limits the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the SCAQMD must comply with the current VOC standards set in this rule.

SCAQMD Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . .", and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate. Rule 219, Equipment Not Requiring a Written Permit Pursuant to Regulation II, identifies "equipment, processes, or operations that emit small amounts of contaminants that shall not require written permits . . ."

SCAQMD Rule 2202 provides employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and State CAA requirements. This Rule applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average, unless otherwise exempt. An employer subject to this Rule is required to annually register with the SCAQMD to implement an emission reduction program, in accordance with subdivisions (f) and (g), that will obtain emission reductions equivalent to a worksite specific emission reduction target (ERT) specified for the compliance year.

#### **Local Regulations**

Rancho Cucamonga General Plan

The Public Health and Safety Chapter of the General Plan addresses air quality, atmosphere, and climate. Motor vehicles represent the major source of regional emissions throughout the SCAB and the City. The Public Health and Safety Chapter identifies sources of non-mobile air pollution that include industrial/manufacturing uses, auto repair businesses, dry cleaners, and other businesses that regularly use chemical solvents. Common sources of PM<sub>10</sub> include road dust, construction activity, grading, and fires (including fireplaces). Air pollution is significantly worse where air pollutants are concentrated, including energy-intensive industrial areas, high volume roads, diesel truck routes, rail yards, and seaports. Goals and policies in the Public Health and Safety Chapter address air quality in the City. These address measures to reduce dependency on automobiles, which will reduce air pollutant emissions from mobile sources.

City of Rancho Cucamonga Development Code

Chapter 17.50, Implementation of Green Building Code, of the City's Development Code requires that new non-residential (including mixed-use development) and residential development or substantial renovations comply with all mandatory provisions of the "City of Rancho Cucamonga, Green Building Compliance Matrix" as required by the CalGreen Code. Section 17.64.100, Bicycle Parking Requirements, of the City's Development Code, requires that all new construction provide bicycle parking. This section of the Development Code outlines requirements for short- and long-term bicycle parking (number of spaces, design requirements, etc.), parking and maneuvering areas, and visibility. Requirements for the number of bicycle parking spaces are similar to those outlined in the CalGreen Code, discussed above.

Chapter 17.78, Transportation Demand Management (TDM), of the City's Development Code encourages employers to implement programs to help reduce the use of single-occupancy vehicles, which also serves to reduce air pollutant emissions from mobile sources. Relevant to the Project, developments subject to the TDM Ordinance include light industrial uses with 250,000 square feet or more. The ordinance requires the provision of passenger loading areas, preferential parking for carpool and vanpool vehicles, shower and locker facilities, video conferencing, and any two of the following: ridesharing program, leasing of vans, company fleet cars, subsidized transit passes, and modified work hours.

Section 17.66.060, Odor, Particulate Matter, and Air Containment Standards, of the City's Development Code, includes performance standards to ensure that uses and activities occur in a manner to protect the public health and safety and that do not produce adverse impacts on surrounding properties or on the community at large. The following standards are relevant to air quality.

- a. Sources of odorous emissions, particulate matter, and air containment standards shall comply with the rules and regulations of the air pollution control district and the State Health and Safety Code;
- b. Noxious odorous emissions in a manner or quantity that is detrimental to or endanger the public health, safety, comfort, or welfare is declared to be a public nuisance and unlawful, and shall be modified to prevent further emissions release, except for agricultural operations in compliance with this title. No emission of odors shall be permitted in such quantities as to be readily detectable when diluted in the ratio of one volume of odorous air to four volumes of clean air at the property line as specified in section 17.66.030 (Points of Measurements). Any process which may involve the creation or emission of any odors shall be provided with a secondary safeguard system, so that control will be maintained if the primary safeguard system should fail;
- c. No dust or particulate matter shall be emitted that is detectable by a reasonable person without instruments; and

d. Exhaust air ducts shall be located or directed away from abutting residentially zoned properties.

#### **Ambient Air Quality**

As stated, local air quality management control is provided by the ARB through county-level or regional (multi-county) Air Quality Management Districts (AQMDs). The ARB establishes air quality standards and is responsible for control of mobile emission sources, while the local AQMDs are responsible for enforcing standards and regulating stationary sources. The ARB has established 15 air basins statewide. The project site is located within the South Coast Air Basin (Basin), which includes portions of Los Angeles, Orange and Riverside Counties. Air quality conditions in the project area are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD 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." The Basin, in which the project area is located, is a non-attainment area for both the federal and state standards for ozone and PM2.5. The Basin is in attainment for the state and federal standards for PM10, nitrogen dioxide, and carbon monoxide. Characteristics of ozone, carbon monoxide, nitrogen dioxide, and suspended particulates are described below.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NOx) and reactive organic gases (ROG)¹. Nitrogen oxides are formed during the combustion of fuels, while reactive organic compounds are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

<u>Carbon Monoxide</u>. Carbon monoxide is a local pollutant that is found in high concentrations only near the source. The major source of carbon monoxide, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

<sup>&</sup>lt;sup>1</sup> Organic compound precursors of ozone are routinely described by a number of variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in a rather confusing array of acronyms: HC, THC (total hydrocarbons), RHC (reactive hydrocarbons), TOG (total organic gases), ROG (reactive organic gases), TOC (total organic compounds), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, from an air quality perspective two groups are important: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (HC, RHC, ROG, ROC, and VOC).

Nitrogen Dioxide. Nitrogen dioxide (NO<sub>2</sub>) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO<sub>2</sub> creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. Nitrogen dioxide is an acute irritant. A relationship between NO<sub>2</sub> and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM<sub>10</sub> and acid rain.

Suspended Particulates. PM10 is particulate matter measuring no more than 10 microns in diameter, while PM<sub>2.5</sub> is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates and sulfates. Both PM10 and PM<sub>2.5</sub> are by-products of fuel combustion and wind erosion of soil and unpaved roads, and are directly emitted into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates (PM2.5) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

<u>Toxic Air Contaminants/Diesel Particulate Matter.</u> Hazardous air pollutants, also known as toxic air pollutants (TACs) or air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Examples of toxic air pollutants include:

- benzene, which is found in gasoline;
- perchloroethylene, which is emitted from some dry-cleaning facilities; and
- methylene chloride, which is used as a solvent.

Transportation related emissions are focused on particulate matter constituents within diesel exhaust and TAC constituents that comprise a portion of total organic gas (TOG) emissions from both diesel and gasoline fueled vehicles. Diesel engine emissions are comprised of exhaust particulate matter and TOGs which are collectively defined for the purpose of an HRA, as Diesel Particulate Matter (DPM). DPM and TOG emissions from both diesel and gasoline fueled vehicles is typically composed of carbon particles and carcinogenic substances including polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and oxides of nitrogen (NOx). Information on TAC and DPM is provided herein for

reference only. While truck operation would generate DPM, the site is not located in proximity to sensitive receptors such that the use would pose a health risk or justify further evaluation in a health risk assessment.

#### Regional Climate and Local Air Quality

South Coast Air Basin. The combination of topography, low mean mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the SCAB the worst air pollution problem in the nation. Climate in the SCAB is determined by its terrain and geographical location. The SCAB consists of a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the SCAB. The SCAB lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is mild, and is tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, or easterly Santa Ana wind conditions can occur.

Annual average temperatures vary little throughout the SCAB, ranging from the low-to-middle 60s, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The majority of annual rainfall in the SCAB occurs between October and March. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the SCAB and along the coastal side of the mountains. Average temperatures in winter months in the project area range from a low of 34 degrees F to a high of 68 degrees F. In the summer, average temperatures range from a low of 59 degrees F to a high of 98 degrees F. During an average year, the greatest amount of precipitation, 2.86 inches, occurs in February.

The SCAQMD operates a network of 38 ambient air monitoring stations throughout the South Coast Air Basin. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the project site is the Upland station, located approximately 5 miles southwest of the project site. Table 2 provides a summary of monitoring data at the Upland Station for ozone and PM<sub>10</sub>. As referenced, the SCAB is a nonattainment area for these two pollutants.

As shown, both the federal and state ozone standards were exceeded at the Upland monitoring station during each of the last three years. The federal PM<sub>10</sub> standard was exceeded one time during the last three years. Insufficient data was available to determine whether the state standard was exceeded or whether the PM<sub>2.5</sub> standard was exceeded.

#### Air Quality Management Plan

The NAAQS and CAAQS presented in Table 2 establish the context for the local AQMPs and for determining the significance of a project's contribution to local or regional pollutant

## Table 2 Ambient Air Quality Data

Pollutant	2016	2017	2018
Ozone, ppm - Worst Hour	0.116	0.127	0.111
Number of days of State exceedances (>0.070 ppm)	88	87	52
Particulate Matter <10 microns, μg/m³ Worst 24 Hours	184	106.5	156.6
Number of samples of State exceedances (>50 μg/m³)	*	*	*
Number of samples of Federal exceedances (>150 μg/m³)	1	*	1
Particulate Matter <2.5 microns, μg/m³ Worst 24 Hours	40.0	73.4	44.9
Number of samples of State exceedances (>12 μg/m³)	*	*	*
Number of samples of Federal exceedances (>12 μg/m³)	*	*	*

Upland – 1350 San Bernardino Road Monitoring Station

\*Data insufficient to determine the value

Source: California Air Resources Board, 2016, 2017, 2018 Annual Air Quality Data Summaries available

at http://www.arb.ca.gov/adam/topfour/topfour1.php

concentrations. The NAAQS and CAAQS represent the level of air quality considered safe, with an adequate safety margin, to protect public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise.

The SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and State air quality standards. Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the State and federal ambient air quality standards. AQMPs are updated regularly to more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy. The AQMP control measures and related emission reduction estimates are based on emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

#### **Sensitive Receptors**

Sensitive receptors include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to air pollutants. Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare as well that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The nearest land use to the Project site that is considered a sensitive receptor for the purposes of evaluating air quality impacts, is the Solamonte Apartments which is located at 9200 Milliken Avenue approximately 0.5 miles (2,690 feet/743 meters) south of the Project site. This receptor is used for evaluation of localized impacts of NOx, CO, PM10 and PM2.5.

#### AIR QUALITY IMPACT ANALYSIS

#### Methodology and Significance Thresholds

This air quality analysis conforms to the methodologies recommended in the SCAQMD's *CEQA Air Quality Handbook* (1993). The handbook includes thresholds for emissions associated with both construction and operation of proposed projects. All emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2020.4.0.

Construction activities such as clearing, grading and excavation would generate diesel and dust emissions. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. It was assumed that all construction equipment used would be diesel-powered. Construction emissions associated with development of the proposed project by estimating the types of equipment (including the number) that would be used on-site during each of the construction phases. Construction emissions are analyzed using the regional thresholds established by the SCAQMD and published in the CEQA Air Quality Handbook.

Operational activities associated with the Project would result in emissions of VOCs, NOX, SOx, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational emissions are generated by area, energy and mobile sources which are summarized as follows:

#### Area Source Emissions

**Architectural Coatings**. Over time the building constructed as part of the project would require maintenance. Emissions would be generated from the use of evaporative solvents contained in paints, varnishes, primers, and other surface coatings.

**Consumer Products**. Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these

products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants.

**Landscape Maintenance Equipment**. Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, blowers, trimmers and related equipment used to maintain the landscaping.

#### **Energy Source Emissions**

**Natural Gas and Electricity**. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. When combustion of natural gas occurs within a building, the building is considered a direct emission source and CalEEMod 2020.4.0 would calculate emissions of all criteria pollutants. The project is not expected to use natural gas; thus, no emissions would be generated by this source.

With respect to electricity, energy used in buildings is typically generated by off-site facilities (i.e. power plants). Because power plants are existing stationary sources, criteria pollutant emissions are generally associated with the power plants and not the individual buildings or electricity users. Project-related electricity generation is considered to take place off-site; and therefore, criteria pollutant emissions are not accounted for.

#### **Mobile Sources**

The project related operational air quality emissions are derived primarily from vehicle trips generated by the project. These include employee trips to and from the site and truck trips associated with the proposed warehouse use. Trip generation rates and total daily and peak hour volumes were calculated and presented in the Trip Generation and Vehicle Miles Traveled (VMT) Memorandum prepared by Mizuta Traffic Consultants, Inc. (July 2021). After review of all the land use categories contained in the *ITE Trip Generation Manual*, the Warehousing land use (Land Use Code 150) was found to be the most relevant since the project is anticipated to operate in a similar matter. A warehousing use is described as follows:

"A warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas."

The *ITE Trip Generation Manual, 10th Edition Supplement,* was referenced to identify the vehicle mix for a warehouse land use. A trip rate of 0.60 trucks per 1,000 square feet was used to estimate the truck traffic. This results in a mix of 65.52 percent passenger cars and 34.48 percent trucks. Furthermore, trucks were classified based on the axle-type, which resulted in approximately 17 percent of the truck traffic comprised of 2-axle trucks, 21 percent of 3-axle trucks, and the remaining 62 percent of 4+-axle trucks. The recommended truck mix percentages are based on the *South Coast Air Quality Management District's (SCAQMD) Warehouse Truck Trip Study Data Results and Usage*. Further, the truck traffic was converted to passenger cars by

utilizing a passenger car equivalent (PCE) factor, which accounts for the fact that trucks utilize more capacity on the roadway than a passenger car because of their size and slower acceleration. A PCE factor of 1.5 was used for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+ axle trucks. The PCE factors are based on the data contained in the *San Bernardino County CMP*, 2016 *Update*.

The project is estimated to generate 278 daily trips with 28 trips in the AM peak-hour and 31 trips in the PM peak-hour. After applying the PCE rates to the forecasted trucks, the project is estimated to generate 426 daily trips with 44 trips in the AM peak-hour and 48 trips in the PM peak-hour.

For the purpose of conservatively evaluating air emissions related to mobile sources, passenger cars/light trucks were calculated as a percentage of the total trips. Similarly, truck trips were also calculated and comprise the remainder of all daily trips. The passenger car and truck fleet for the proposed warehouse use were addressed as separate emission sources. Thus, two separate model runs were utilized for cars/light trucks associated with employee and vendor trips and heavy trucks used to transport goods to and from the project site. The total number of daily trips were calculated assuming 37% of all trips are trucks. Thus, the trip generation rate in CalEEMod was modified to calculate passenger car trips assuming 1.1 trips/1,000 square feet and truck trips were calculated assuming 0.64 trips/1,000 square feet as recommended in the *South Coast Air Quality Management District Mobile Source Committee. Warehouse Truck Trip Study Data Results and Usage* (July 25, 2014). Thus, daily trips were assumed to comprise 175 passenger cars/light trucks and 102 truck trips. This equates to approximately 100 daily trips more than what is assumed for trip generation purposes as part of the Trip Generation and Vehicle Miles Traveled analysis (Mizuta Traffic Consulting, Inc. July 2021).

Passenger Cars. Passenger car/light truck emissions were calculated using the CalEEMod 2020.4.0 default trip length of 16.6 miles for passenger cars and the assumption that all trips would be primary trips (i.e., to/from home and work). The analysis assumed that passenger cars are comprised of Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1 & LDT2), and Medium-Duty-Vehicles (MDV) vehicle types. Thus, for the purpose of calculating passenger car emissions, vehicle emissions, all other vehicle types were assumed to have no contribution to the daily project fleet mix. The fleet mix and percentage of total trips are shown in Table 3.

Table 3
Passenger Car Fleet Mix

Land Use	Vehicle Type	Fleet Percentage
Warehouse (ITE Land Use	LDA	62.42%
Code 150)	LDT1	4.11%
	LDT2	20.35%
	MDV	13.12%

Source: Urban Crossroads, Bridge Point Rancho Cucamonga Air Quality Impact Analysis, April 2021

Note: Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the CalEEMod default percentage assigned to LDA, LDT1, LDT2, and MDV vehicle types.

Trucks. The truck emission calculations assumed the SCAQMD recommended truck trip length of 40 miles and an assumption of 100% primary trips. The trucks are comprised of 2-axle/Light-Heavy-Duty Trucks (LHDT), 3-axle/Medium-Heavy-Duty Trucks (MHDT), and 4+-axle/Heavy-Heavy-Duty Trucks (HHDT). To conservatively estimate truck emissions, the breakdown for a High Cube Fulfillment Center (Non-Sort) Warehouse was used consistent with recent methodologies used in Rancho Cucamonga for other warehouse/industrial projects. The fleet mix is shown in Table 4.

Table 4 Heavy Truck Fleet Mix

Land Use	Vehicle Type	Fleet Percentage
Warehouse (ITE Land Use	LHDT	16.58%
Code 150)	MHDT	20.86%
	HHDT	62.56%

Source: Urban Crossroads, Bridge Point Rancho Cucamonga Air Quality Impact Analysis, April 2021

Note: The average trip length for heavy trucks were based on the SCAQMD documents for the implementation of the Facility Based Mobile Source Measures (FBMSMs) adopted in the 2016 AQMP. SCAQMD's "Preliminary Warehouse Emission Calculations" cites 39.9-mile trip length for heavy-heavy trucks). A trip length of 40 miles has been used for all trucks for the purpose of this analysis.

Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT, MHDT, HHDT) relative to the total number of truck trips generated by the project.

<u>Regional Thresholds</u>. Based on Appendix G of the *CEQA Guidelines*, a project would have a significant air quality impact if it would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- d) Expose sensitive receptors to substantial pollutant concentrations; or
- e) Create objectionable odors affecting a substantial number of people.

The SCAQMD has developed specific quantitative thresholds that apply to projects within the SCAB. The following significance thresholds apply to short-term construction activities:

- 75 pounds per day of ROG
- 100 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of SOx
- 150 pounds per day of PM<sub>10</sub>
- 55 pounds per day of PM2.5

The following significance thresholds apply to long-term operational emissions:

- 55 pounds per day of ROG
- 55 pounds per day of NOx
- 550 pounds per day of CO
- 150 pounds per day of SOx
- 150 pounds per day of PM<sub>10</sub>
- 55 pounds per day of PM2.5

#### **Construction Emissions**

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from heavy construction vehicles, in addition to ROG that would be released during the drying phase upon application of paint and other architectural coatings. Construction would generally consist of demolition, site preparation, grading, construction of the proposed buildings, paving, and architectural coating (i.e., paint) application.

This analysis assumes that graded soils would be balanced on the project site and that no soil import or export would be required. The project would be required to comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required to be implemented at all construction sites located within the South Coast Air Basin. Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for site preparation and grading phases of construction.

- 1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.
- 2. Soil Treatment. Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after

- work is done for the day. The analysis provided herein assumes watering would occur two times daily.
- 3. Soil Stabilization. Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
- **4. No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
- **5. Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Construction emissions modeling for demolition, site preparation, grading, building construction, paving, and architectural coating application is based on the overall scope of the proposed development and construction phasing which is expected to begin early 2022 and extend through early 2023, a duration of approximately 12 months. For dust control, it was assumed the disturbed area would be watered twice daily. In addition to SCAQMD Rule 403 requirements, emissions modeling also accounts for the use of low-VOC paint (50 g/L for non-flat coatings and 100 g/L for pavement coatings) as required by SCAQMD Rule 1113. Table 5 summarizes the estimated maximum mitigated daily emissions of pollutants occurring during 2022.

Table 5
Estimated Maximum Mitigated Daily Construction Emissions

O a made maddia m Dhana	Maximum Emissions (lbs/day)						
Construction Phase	ROG	NOx	со	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>	
2022 Maximum Ibs/day	3.2	33.1	21.2	0.04	10.6	6.1	
2023 Maximum Ibs/day	36.1	17.0	22.4	0.04	2.1	1.1	
SCAQMD Regional Thresholds	75	100	550	150	150	55	
Threshold Exceeded 2021	No	No	No	No	No	No	
Threshold Exceeded 2022	No	No	No	No	No	No	

As shown in Table 5, construction of the proposed project would not exceed the SCAQMD regional thresholds. However, ROG emissions assumed that the architectural coating application phase overlapped building construction by approximately 44 days to avoid exceeding the daily ROG standard. Thus, implementation of Mitigation Measure AQ-1 would be required to avoid a significant impact during the architectural coating phase of the project.

**Mitigation Measure AQ-1:** Condition project to overlap architectural coating phase with the building phase by approximately 44 total workdays to avoid exceeding the daily ROG standard.

Localized Significance Thresholds. The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011). The following describes the methods used to apply the fact sheet methods to the CalEEMod output data for comparison with the Localized Significance Thresholds (LSTs). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. Construction-related emissions reported by CalEEMod are compared to the localized significance threshold lookup tables. The CalEEMod output in Appendix A shows the equipment assumed for this analysis.

LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor and related factors. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed for NOx, CO, PM10 and PM2.5. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003). As such, LSTs for operational emissions do not apply to the proposed development as the majority of project emissions would be generated by cars on roadways traveling to/from the facility.

LSTs have been developed for emissions within areas of one, two and five acres in size, with air pollutant modeling recommended for activity within larger areas. While emission modeling was performed for the project, an LST evaluation was also performed to conservatively address potential short-term construction impacts. The project site is located in Source Receptor Area 32 (SRA-32, Northwest San Bernardino Valley). According to the SCAQMD's publication *Final Localized Significant (LST) Thresholds Methodology*, the use of LSTs is voluntary, to be implemented at the discretion of local agencies. LSTs for construction related emissions in the SRA 32 at varying distances between the source and receiving property are shown in Table 6. The area disturbed during daily grading based on the default equipment mix generated by CalEEMod is four acres. To conservatively evaluate potential LST impacts, the thresholds for a two-acre site are shown.

As referenced, the nearest sensitive receptors to the project site are residences located approximately 0.5 miles to south. Consistent with SCAQMD recommendations for projects with receptors greater than 500 meters from a construction site, the 500-meter LSTs are used. As discussed, LSTs apply to on-site uses only and do not include off-site vehicle trips and emissions. LSTs are compared to estimated project emissions in Table 5.

As shown in Table 7, no LST's would be exceeded during construction at the receivers located within 500 meters of the active construction area. No mitigation measures are required.

Table 6
SCAQMD LSTs for Construction

Pollutant	Allowable emissions as a function of receptor distance in meters from a two-acre site (lbs/day)					
	25	50	100	200	500	
Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub>	170	200	263	378	684	
со	1,232	1,877	3,218	6,778	24,768	
PM <sub>10</sub>	6	19	34	66	160	
PM <sub>2.5</sub>	5	8	14	36	150	

Source: <a href="http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf">http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf</a>, October 2009.

#### Construction-Related Toxic Air Contaminant Impacts

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year

Table 7
Estimated Mitigated Daily On-Site Construction Emissions and LSTs

On-Site Construction Emissions	NOx	СО	PM <sub>10</sub>	PM <sub>2.5</sub>
Demolition	31.4	21.5	1.5	1.4
Site Preparation	40.4	21.1	10.1	6.3
Grading	24.7	15.8	4.1	2.5
Building Construction	17.4	16.7	0.9	0.9
Paving	9.5	12.1	0.4	0.4
Architectural Coating	1.4	1.8	0.08	0.08
Local Significance Threshold – 500 meters (on-site only) <sup>2</sup>	684	24,768	160	150
Threshold Exceeded	No	No	No	No

Notes: All calculations were made using CalEEMod. See the Appendix A. Grading, Paving, Building Construction, and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust.

lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the short-term construction schedule, the proposed project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and related individual cancer risk. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project.

#### Construction-Related Odor Impacts

Potential sources of odor during construction activities include equipment exhaust and activities such as paving. The objectionable odors that may be produced during the construction process would occur periodically and end when construction is completed. No significant impact related to odors would occur during construction of the proposed project per threshold (e) referenced above.

#### **Long-Term Regional Impacts**

#### Regional Pollutant Emissions

Table 8 summarizes summer emissions associated with operation of the proposed project. Operational emissions include emissions from electricity consumption (energy sources), vehicle trips (mobile sources), and area sources including architectural coating emissions as the structures are repainted over the life of the project. The majority of operational emissions are associated with vehicle trips to and from the project site. As stated, the trip generation rate in CalEEMod 2020.4.0 was modified to calculate passenger car trips assuming 1.1 trips/1,000 square feet and truck trips were calculated assuming 0.64 trips/1,000 square feet as recommended in the *South Coast Air Quality Management District Mobile Source Committee*. *Warehouse Truck Trip Study Data Results and Usage* (July 25, 2014) and consistent with SCAQMD documents for the implementation of the Facility Based Mobile Source Measures (FBMSMs)

Site Preparation and Grading phases incorporate anticipated emissions reductions required by SCAQMD Rule 403 to reduce fugitive dust.

<sup>1 -</sup> Total daily emissions over the construction cycle were totaled as requested by reviewer. The LSTs are for daily on-site emissions. Note that daily on-site emission estimates do not exceed the LSTs.

<sup>2-</sup> LSTs are for a two-acre disturbance area in SRA-32 within 500 meters of sensitive properties boundary.

adopted in the 2016 AQMP. Daily trips were assumed to comprise 175 passenger cars/light trucks and 102 truck trips.

As shown in Table 8, daily emissions would not exceed the SCAQMD thresholds for ROG, NOx, CO, SOx, PM<sub>10</sub> or PM<sub>2.5</sub>. Therefore, the project's regional air quality impacts (including impacts related to criteria pollutants, sensitive receptors and violations of air quality standards) would be **less than significant**.

Table 8
Estimated Operational Emissions

	Estimated Emissions (lbs/day)					
	ROG	NOx	со	SO <sub>X</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Proposed Project	J	l .				
Area	3.6	0.01	0.02	0.0	0.01	0.01
Energy	0.1	0.08	0.07	0.01	0.01	0.01
Mobile – Light Duty	0.3	0.4	6.6	0.01	2.2	0.5
Mobile – Heavy Duty	0.3	16.6	4.2	0.09	3.8	1.2
Maximum Ibs/day	4.3	17.1	10.9	0.11	6.1	7.9
SCAQMD Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

See Appendix for CalEEMod version. 2020.4.0 computer model output for operational emissions. Summer emissions shown

Note - totals may vary slightly due to rounding.

#### Operational Toxic Air Contaminant Emissions

As referenced above, transportation related emissions are focused on particulate matter constituents within diesel exhaust and TAC constituents that comprise a portion of total organic gas (TOG) emissions from both diesel and gasoline fueled vehicles. Diesel engine emissions are comprised of exhaust particulate matter and TOGs which are collectively defined for the purpose of a health risk assessment, as Diesel Particulate Matter (DPM). DPM and TOG emissions from both diesel and gasoline fueled vehicles is typically composed of carbon particles and carcinogenic substances including polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and oxides of nitrogen (NOx). While truck operation would generate DPM, the site is located along an unrestricted truck route (Milliken Avenue) within the City of Rancho Cucamonga per Section 10.56.010 of the Municipal Code. The California Air Resources Board (CARB) Air Quality and Land Use Handbook (2005) recommends avoiding the siting of new sensitive receptors within 500 feet of an urban roadway with 100,000 vehicles daily. Traffic counts from 2015 show daily volumes on Milliken Avenue in proximity to Jersey Boulevard are 30,310. If these volumes are factored up by 2% annually, the

2021 volumes would be approximately 34,134. This is less than the recommended threshold. The project is not a sensitive use and project traffic would utilize an existing truck route. The nearest receptor is located approximately one-half mile south of the site along Milliken Avenue and daily volumes are less than the CARB recommended threshold. Thus, project-related truck traffic would not pose a health risk or justify further evaluation in a health risk assessment.

#### Objectionable Odors

The proposed warehouse would receive, store and distribute various dry goods. The facility is not expected to create or emit objectionable odors. Therefore, this impact would be less than significant per threshold (e).

#### **AQMP Consistency**

In March 2017, the SCAQMD released the Final 2016 AQMP (2016 AQMP). The 2016 AQMP evaluates current integrated strategies and control measures to meet the NAAQS and explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, State, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS), a planning document that supports the integration of land use and transportation to help theregion meet the federal CAA requirements.

The Project's consistency with the AQMP is determined based on the 2016 AQMP, as discussed below. Criteria for determining consistency with the AQMP are defined in Chapter 12, Sections 12.2 and Section 12.3 of the 1993 CEQA Handbook. These indicators are discussed below.

Consistency Criterion No. 1: The proposed Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded. As discussed herein, the Project's construction activities would not exceed any of the SCAQMD daily thresholds or LSTs. Thus, construction activities would not conflict with the 2016 AQMP. Further, operational emissions would not exceed the applicable regional thresholds; therefore, operational activities would not conflict with the 2016 AQMP. Impacts would be less than significant for this criterion.

Consistency Criterion No. 2: The Project would not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the SCAQMD are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Therefore, development consistent with the growth projections in the Rancho Cucamonga General Plan is considered to be consistent with the AQMP. The City of Rancho Cucamonga is currently in the process of updating its General Plan. However, the project is consistent with the current General Industrial and Heavy Industrial land use designation. The proposed project is also consistent with the current zoning. Further, as discussed in Section 4.8-2 of the *Jersey Industrial Complex Project Draft EIR*, the project would have a less than significant impact related to vehicle miles traveled (VMT). Based on these facts, the project would be consistent with the AQMP. Impacts would be **less than significant** under threshold a.

#### **GREENHOUSE GAS EMISSIONS**

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas CH<sub>4</sub> results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases and sulfur hexafluoride (SF<sub>6</sub>) (California Environmental Protection Agency [CalEPA], 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO<sub>2</sub>E), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a GWP of one. By contrast, methane (CH<sub>4</sub>) has a GWP of 21, meaning its global warming effect is 21 times greater than carbon dioxide on a molecule per molecule basis (IPCC, 1997).

Total U.S. GHG emissions were 6,676.6 MMT CO<sub>2</sub>E in 2018 (U.S. EPA, April 2020). Total U.S. emissions increased by 3.7 percent from 1990 to 2018. Overall, net emissions increase 3.1 percent from 2017 to 2018 and decreased from 10.2 percent from 2005 levels. The decline reflects many long-term trends, including population, economic growth, energy market trends, technological changes including energy efficiency, and energy fuel choices. Between 2017 and 2018, the increase in total greenhouse gas emissions was largely driven by an increase in CO2 emissions

from fossil fuel combustion. This resulted from many factors including increased energy use from greater heating and cooling needs caused by a colder winter and hotter summer in 2018 compared to 2017.

The primary greenhouse gas emitted by human activities in the United States was CO2, representing approximately 81.3 percent of total greenhouse gas emissions. The largest source of CO2, and of overall greenhouse gas emissions, was fossil fuel combustion. Methane emissions (CH4) account for nearly 10 percent of emissions and have decreased by 7 percent since 2005 and 18.1 percent since 1990. The major sources of methane include enteric fermentation associated with domestic livestock, natural gas systems, and decomposition of wastes in landfills. Agricultural soil management, stationary fuel combustion, manure management, and mobile sources of fuel combustion were the major sources of N2O emissions.

Based upon the California Air Resources Board (ARB) California Greenhouse Gas Inventory, 2019 edition, California produced 424.1 MMT CO<sub>2</sub>E in 2017. The major source of GHG in California is transportation, contributing 41 percent of the state's total GHG emissions. The industrial sector is the second largest source, contributing 24 percent of the state's GHG emissions (ARB, June 2019). California produced 441.5 MMT CO<sub>2</sub>E in 2014. The major source of GHG was transportation, contributing 37 percent of the state's total GHG emissions. The industrial sector was the second largest source, contributing 24 percent of the state's GHG emissions (ARB, June 2016).

California emissions result in part to its geographic size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. The ARB has projected statewide unregulated GHG emissions for the year 2020 is projected to be 509 MMT CO<sub>2</sub>E (ARB, May 2014). These projections are based on Business As Usual (BAU) conditions and represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

#### **Federal Regulations**

Greenhouse Gases Endangerment

In *Massachusetts v. Environmental Protection Agency* (EPA) 549 U.S. 497 (2007), decided on April 2, 2007, the U.S. Supreme Court (Supreme Court) found that four GHGs, including CO2, are air pollutants subject to regulation under Section 202(a)(1) of the Federal Clean Air Act (CAA). The Court held that the EPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA (Endangered Finding and Cause of Contribute Finding).

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings.

Light-Duty Vehicle Greenhouse Gas Emission and Corporate Average Fuel Economy Standards Congress first passed the Corporate Average Fuel Economy (CAFE) law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the U.S. The national program's first phase applies to passenger cars, light-duty trucks, and medium-duty (MD) passenger vehicles, covering model years 2012 through 2016. The EPA and the NHTSA issued final rules on a second phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012. The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and MD passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO2 in model year 2025, equivalent to 54.5 mpg if achieved exclusively through fuel economy improvements. The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011 addressing model years through 2018.

On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years* 2021-2026 *Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing CAFE and tailpipe CO2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule, which increased the stringency of CAFE and CO2 emissions standards by 1.5% each year through model year 2026.

#### SmartWay Program

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the California Air Resources Board (CARB) GHG Regulations designed with the SmartWay Program in mind to reduce GHG emissions by making them more fuel-efficient. Through the SmartWay Technology Program, the EPA has evaluated the fuel-saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects, and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when appropriately used in their designed applications, and has verified certain products: idle reduction technologies, aerodynamic technologies, low rolling resistance tires, retrofit technologies, and federal excise tax exemptions.

#### California Regulations

In 2005, former Governor Schwarzenegger issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 states that by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent of 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report recommended various strategies that the state could pursue to reduce GHG emissions. These strategies could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

#### Assembly Bill 32 and CARB's Scoping Plan

To further the goals established in EO S-3-05, the Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO<sub>2</sub>E). CARB's adoption of this limit is in accordance with Health and Safety Code, Section 38550.

Further, in 2008, CARB adopted the Scoping Plan in accordance with Health and Safety Code, Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards;

- 2. Achieving a statewide renewable energy mix of 33%;
- 3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions;
- 4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- 6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan (CARB 2008), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level (i.e., those emissions that would occur in 2020) absent GHG reducing laws and regulations (referred to as Business-As-Usual (BAU)). To calculate this percentage reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (CARB 2011a), CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the BAU conditions. When the 2020 emissions level projection was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (RPS) (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the BAU conditions.

In 2014, CARB adopted the First Update to the Climate Change Scoping Plan: Building on the Framework (First Update; CARB 2014). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050" (CARB 2014). The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32 and noted that California could reduce emissions further by 2030 to levels needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050"

(CARB 2014). Those six areas are (1) energy, (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), (3) agriculture, (4) water, (5) waste management, and (6) natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal (CARB 2014).

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050" (CARB 2014). Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent GWPs identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO<sub>2</sub>E) and the revised 2020-emissions-level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the BAU conditions (CARB 2014).

In January 2017, CARB released, *The 2017 Climate Change Scoping Plan Update* (Second Update; CARB 2017b), for public review and comment. This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), acknowledges the need for reducing emissions in agriculture, and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). The Second Update has not been considered by CARB's Governing Board at the time this analysis was prepared.

Executive Order S-01-07 was enacted on January 18, 2007. The order mandates that a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.

Other regulations affecting state and local GHG planning and policy development are summarized as follows:

Assembly Bill 939 and Senate Bill 1374

Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board

to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

#### Senate Bill 1368

Senate Bill 1368 (SB 1368) is the companion Bill of AB 32 and was adopted September, 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007 and for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas-fired plant. Furthermore, the legislation states that all electricity provided to the State, including imported electricity, must be generated by plants that meet the standards set by California Public Utilities Commission (CPUC) and California Energy Commission (CEC).

#### Senate Bill 97

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is an environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010. Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.

- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation."
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

Senate Bills 1078, 107, and X1-2 and Executive Orders S-14-08 and S-21-09
Senate Bill 1078 (SB 1078) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) changed the target date to 2010. Executive Order S-14-08 was signed on November 2008 and expands the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

#### California Code of Regulations (CCR) Title 24, Part 6

CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008 and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. All buildings for which an application for a building permit is submitted on or after July 1, 2014 must follow the 2013 standards. The 2013 commercial standards are estimated to be 30 percent more efficient than the 2008 standards; 2013 residential standards are at least 25 percent more efficient. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted in September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable community's strategy or alternate planning strategy for consistency with its assigned targets.

#### SCAG's 2016-2040 RTP/SCS

SB 375 requires that Metropolitan Planning Organizations (MPOs) prepare a sustainable communities strategy as part of the their regional transportation plan. For the Southern California Association of Governments (SCAG) region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016 and is an update to the 2012 RTP/SCS (SCAG 2016). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources. The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario.

Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers to achieve consistency with the SCS.

However, CEQA incentivizes, through streamlining and other provisions, qualified projects that are consistent with an approved SCS or APS and categorized as "transit priority projects."

#### Senate Bill X7-7

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop

alternative best management practices for the water sector. Additionally, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

#### California Green Building Standards

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2016 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2017. In general, single-family homes built to the 2016 standards are anticipated to use approximately 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and nonresidential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a).

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as "CALGreen," and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017. The mandatory standards require the following (24 CCR Part 11):

 Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;

- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance;
- Diversion of 65% of construction and demolition waste from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle board.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements, stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs (24 CCR Part 11).

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include the following: (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030 (CPUC 2013).<sup>2</sup> As most recently defined by the CEC in its 2015 Integrated Energy Policy Report (CEC 2015b), a ZNE code building is "one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building" using the CEC's Time Dependent Valuation metric.

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types

<sup>&</sup>lt;sup>2</sup> It is expected that achievement of the ZNE goal will occur through revisions to the Title 24 standards.

of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

#### Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO2E. EO B-30-15 also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

#### Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set new statewide GHG reduction targets, make changes to CARB's membership, increase legislative oversight of CARB's climate change—based activities, and expand dissemination of GHG and other air quality—related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 added two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

South Coast Air Quality Management District Rule 2305 – Warehouse Indirect Source Rule – Warehouse On May 7, 2021, SCAQMD adopted Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, and Rule 316 – Fees for Rule 2305. Rules 2305 and 316 are new rules that will reduce regional and local emissions of nitrogen oxides (NOx) and particulate matter (PM), including diesel PM. These emission reductions are intended to reduce public health impacts within communities located near warehouses from mobile sources that are associated with warehouse activities. Further, the emission reductions will help the region attain federal and state ambient air quality standards. Rule 2305 applies to owners and operators of warehouses greater than or equal to 100,000 square feet. Under Rule 2305, operators are subject to an annual WAIRE Points Compliance Obligation that is calculated based on the annual number of truck trips to the warehouse. WAIRE Points can be earned by implementing actions in a prescribed menu in Rule 2305, implementing a site-specific custom plan, or paying a mitigation fee. Warehouse owners are only required to submit limited information reports, but they can opt in to earn Points on behalf of their tenants if they so

choose because certain actions to reduce emissions may be better achieved at the warehouse development phase. Rule 316 is a companion fee rule for Rule 2305 that allows SCAQMD to recover costs associated with Rule 2305 compliance.

## **Local Regulations and CEQA Requirements**

As referenced, pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted CEQA Guidelines provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, but contain no suggested thresholds of significance for GHG emissions. Instead, lead agencies are given the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The general approach to developing a Threshold of Significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move the state towards climate stabilization. If a project would generate GHG emissions above the threshold level, its contribution to cumulative impacts would be considered significant. To date, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted quantitative significance thresholds for GHGs. However, in March 2013 the Bay Area's thresholds were overruled by the Alameda County Superior Court (California Building Industry Association v. Bay Area Air Quality Management District), on the basis that adoption of the thresholds constitutes a "project" under CEQA, but did not receive the appropriate environmental review. As a result, BAAQMD has elected to not recommend specific GHG thresholds for use in CEQA documents.

The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 metric tons CO2E /year to be significant. However, the SCAQMD's threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not formally adopted, the SCAQMD has developed a draft quantitative threshold for all land use types of 3,000 metric tons CO2E /year (SCAQMD, September 2010). Note that lead agencies retain the responsibility to determine significance on a case-by-case basis for each specific project.

Sustainable Community Action Plan. Adopted in April 2017, the Sustainable Community Action Plan serves as a roadmap for advancing environmental sustainability and reducing greenhouse gas emissions and identifying long-term actions that can be implemented to reduce city-wide GHG emissions beyond 2020. It is intended to serve as a vision for sustainability in Rancho Cucamonga and identify initial steps the City can take to begin implementing sustainability initiatives. The Sustainable Community Action Plan:

- Describes a vision for Rancho Cucamonga's desire for a sustainable future.
- Articulates the community's values and priorities as guiding principles for the Plan.
- Confirms greenhouse gas reduction goals.

- Highlights recent accomplishments and projects undertaken by the City and community.
- Identifies new policy and program opportunities to achieve environmental sustainability goals; and
- Expresses the sustainability, economic, and health co-benefits through a triple-bottom line evaluation.

Project consistency with the Sustainable Community Action Plan is described below.

Greenhouse Case Emissions and Climate Change Vulnerability Assessment. The City of Rancho Cucamonga released the Greenhouse Gas Emissions and Climate Change Vulnerability Assessment (Assessment) report in May 2020. The Assessment discusses climate change science and existing guidance for setting communitywide reduction targets and developing plans for GHG reduction. The Assessment also summarizes current and potential future climate-related impacts that may affect the City, evaluates how these impacts would potentially affect the community's populations, assets, and functions, and prioritizes how the City should address each vulnerability through the General Plan Update and Local Hazard Mitigation Plan.

#### CLIMATE CHANGE IMPACT ANALYSIS

## Thresholds of Significance

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions in March 2010. These guidelines are used in evaluating the cumulative significance of GHG emissions from the proposed project. According to the adopted CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City of Rancho Cucamonga does not have an adopted threshold of significance for GHG emissions. For CEQA purposes, the City has discretion to select an appropriate significance criterion, based on substantial evidence. The SCAQMD's adopted numerical threshold of 10,000 MTCO2e/year for industrial stationary source emissions is used herein as the significance criterion. The Project would develop a warehouse building, which is a common characteristic of an industrial project and analogous to an industrial use. Also, 10,000 MTCO2e has been used as the significance threshold by many local government lead agencies for logistics projects throughout the SCAG region since the SCAQMD adopted this threshold for its own use. To ensure that the threshold is conservative in its application, the 10,000 MTCO2e threshold is

applied cumulatively to all sources of project-related GHG emissions rather than exclusively to stationary source emissions as used by the SCAQMD for stationary sources.

Use of this threshold is also consistent with guidance provided in the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change handbook. As such the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90% of emissions from future development. SCAQMD determined that use of the 10,000 MTCO2e threshold would result in a capture rate of 90% for all new or modified projects.

## Methodology

The California Emission Estimator Model (CalEEMod) version 2020.4.0 was used to estimate GHG emissions during the construction and operation of the proposed project. Based on the construction schedule, types and quantities of construction equipment, and haul trucks, as well as employee trips, daily truck trips and area and energy sources associate with operation of the building, the maximum annual CO<sub>2</sub>e emissions were calculated. The GHG emissions for each construction year are compared with SCAQMD's GHG screening threshold for industrial uses summarized below.

Mobile sources are the dominant generator of GHG emissions associated with project operation. The approach used to calculate mobile source emissions is discssed in Section 4.1.3 of this Draft EIR. In summary, passenger cars emissions were calculated separately from truck emissions and the fleet mix adjusted to include only Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1 and LDT2), and Medium-Duty-Vehicles (MDV) vehicles. All travel trips were assumed to be primary, home/work trips with a trip length of 16.6 miles. Truck emissions were calculated assuming a trip generation rate of 0.64 daily trips/1,000 square feet for 2-axle/Light-Heavy-Duty Trucks (LHDT), 3-axle/Medium-Heavy-Duty Trucks (MHDT), and 4+-axle/Heavy-Heavy-Duty Trucks (HHDT). The default trip length was adjusted to 40 miles.

#### **Construction Emissions**

Construction of the proposed project would generate temporary GHG emissions primarily associated with the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest emission quantities because the use of heavy equipment is greatest during this phase of construction. Emissions associated with the construction period were estimated based on the projected maximum amount of equipment that would be used onsite at one time. Air districts such as the SCAQMD have recommended amortizing construction-related emissions over a 30-year period to calculate annual emissions. Complete CalEEMod results and assumptions can be viewed in the Appendix.

#### Operational Emissions

Default values used in CalEEMod version 2020.4.0 are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>. This methodology has been subjected to peer review by numerous public and private stakeholders, and in particular by the CEC; and therefore, is considered reasonable and reliable for use in GHG impact analysis pursuant to CEQA. It is also recommended by CAPCOA (January 2008).

Emissions associated with area sources (i.e., consumer products, landscape maintenance, and architectural coating) were calculated in CalEEMod based on standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, May 2021). Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide, May 2021). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California. Emissions from mobile sources were quantified based on trip generation estimates included in CalEEMod version 2020.4.0 and verified per the trip generation memorandum prepared by Mizuta Traffic Consulting, Inc., (July 2021).

#### **Estimate of GHG Emissions**

#### **Construction Emissions**

Construction activity is assumed to occur over a period of approximately 12 months beginning in mid-2022 and concluding in early 2023. Based on CalEEMod results, construction activity for the project would generate an estimated 505 metric tons of carbon dioxide equivalent (CO<sub>2</sub>E), as shown in Table 9. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate 17 metric tons of CO<sub>2</sub>E per year.

#### Operational Indirect and Stationary Direct Emissions

Long-term emissions relate to energy use, solid waste, water use, and transportation. Each source is discussed below and includes the emissions associated with existing development and the anticipated emissions that would result from the proposed project.

<u>Energy Use</u>. Operation of onsite development would consume both electricity and natural gas (see Appendix for CalEEMod results). The generation of electricity through combustion of fossil fuels typically yields CO<sub>2</sub>, and to a smaller extent, N<sub>2</sub>O and CH<sub>4</sub>. Natural gas emissions can be calculated using default values from the CEC sponsored CEUS and RASS studies which are

Table 9
Estimated Construction Related Greenhouse Gas
Emissions

Year	Annual Emissions (metric tons CO₂E)	
2022	234	
2023	271	
Total	505	
Amortized over 30 years	17 metric tons per year	

See Appendix for CalEEMod software program output for new construction.

built into CalEEMod. As shown in Table 10, the overall net increase in energy use at the project site would result in approximately 86 metric tons of CO<sub>2</sub>E per year.

<u>Water Use Emissions</u>. The CalEEMod results indicate that the project would use approximately 29.5 million gallons of water per year. Based on the amount of electricity generated to supply and convey this amount of water, as shown in Table 11, the project would generate approximately 204 metric tons of CO<sub>2</sub>E per year.

<u>Solid Waste Emissions</u>. For solid waste generated onsite, it was assumed that the project would achieve a 75% diversion rate, as required by the California Integrated Waste Management Act of 1989 (AB 939), as amended by AB 341. The unmitigated modeling results indicate that the project would result in approximately 75 metric tons of CO<sub>2</sub>E per year associated with solid waste disposed within landfills.

<u>Transportation Emissions</u>. Mobile source GHG emissions were estimated using the annual vehicle miles traveled (VMT) calculated by CalEEMod for the proposed project. Table 12 shows the estimated mobile emissions of GHGs for the project based on the estimated total annual VMT of 2,547,701. As shown in Table 12, the project would generate approximately 2,096 metric tons of CO<sub>2</sub>E associated with new passenger car and heavy truck trips.

Table 10
Estimated Annual Energy-Related Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO₂E)
Natural Gas	17 metric tons
Electricity	69 metric tons
Total	86 metric tons

See Appendix for CalEEMod software program output.

Table 11
Estimated Annual
Solid Waste and Water Use Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO₂E)	
Water	136 metric tons	
Solid Waste	75 metric tons	
Total Water and Solid Waste	211 metric tons	

See Appendix for CalEEMod software program output..

Table 12
Estimated Annual Mobile Emissions of Greenhouse Gases

Emission Source	Annual Emissions (CO₂E)
Proposed Project	
Mobile Emissions – Passenger Cars	311 metric tons
Heavy trucks	1,785 metric tons
Total	2,096 metric tons

See Appendix for CalEEMod software program output.

#### Combined Construction, Stationary and Mobile Source Emissions

Table 13 combines the net new construction, operational, and mobile GHG emissions associated with the proposed project. As discussed above, temporary emissions associated with construction activity (approximately 505 metric tons CO<sub>2</sub>E) are amortized over 30 years (the anticipated life of the project). The combined annual emissions would total approximately 2,410 metric tons per year in CO2E. The majority (86%) of the project's GHG emissions are associated with mobile sources. As

Table 13
Combined Annual Greenhouse Gas Emissions

Emission Source	Annual Emissions (CO <sub>2</sub> E)
Construction	17 metric tons
Operational	
Energy	86 metric tons
Solid Waste	75 metric tons
Water	136 metric tons
Mobile	2,096 metric tons
Total	2,410 metric tons

See Appendix for CalEEMod software program output (demolition and new construction).

noted above, neither the SCAQMD nor the City of Rancho Cucamonga has adopted GHG emissions thresholds that apply to land use projects. Therefore, the proposed project is evaluated based on the SCAQMD's interim threshold of 10,000 metric tons CO2E per year for warehouse/industrial uses. Project-related annual GHG emissions would not exceed the threshold of 10,000 metric tons per year; therefore, no measures are needed to reduce GHG emissions to below CEQA thresholds.

**GHG Cumulative Significance**. As discussed, a proposed warehouse/industrial project exceeding the 10,000 annual MT screening threshold could have a significant environmental impact under CEQA. The calculations presented herein show emissions would not exceed 10,000 MT CO2E annually. No GHG mitigation measures are required.

#### Sustainable Community Action Plan

The Rancho Cucamonga Sustainable Community Action Plan (April 2017) summarizes the direction and future goals for sustainability in Rancho Cucamonga and is the result of a collaborative effort between residents, local businesses, community organizations, students, City staff and elected officials, and regional agencies. The Land Use, Open Space Goals and Policies section supports City Council mid- and long-range planning goals regarding sustainable land use decisions, open space enhancement and revitalization. The Green Building Performance section addresses the construction of energy efficient buildings that reduce overall demand for conventional forms of electricity and use of natural gas. The Water+Wastewater section addresses policies and methods to reduce potable water use and generation of wastewater. A directive incorporated into the Sustainable Community Action Plan focuses on developing standards to address mixed use, high density, Transit Oriented Development in underperforming or underutilized areas. Specific components of the project that would incorporate goals and policies within the Sustainable Community Action Plan focus on energy conservation, construction of buildings that are consistent with green building standards, reduced demand for potable water and achieving a 75% reduction of solid waste generated by the project that enters area landfills.

The proposed site is zoned Minimum Impact/Heavy Industrial and the proposed project is permitted outright within this zone per the zoning code. The project would be constructed on a vacant site within an existing industrial area and surrounding by existing industrial uses. The building would be designed consistent with Title 24 of the California Energy Code and applicable elements of the CalGreen green building standards code. The project would implement a water reduction program designed to reduce water consumption by 20% as required by Executive Order B-25-15 and implement a recycling program with a goal of recycling 75% of all waste material consistent with AB 341.

Striped shoulders are located on both Milliken Avenue and Jersey Boulevard. Miliken Avenue is a designated bicycle route in the General Plan Mobility Element. The project would be conditioned to make frontage improvements (i.e., sidewalk/curb/gutter) to ensure consistency with City of Rancho Cucamonga standards and facilitate pedestrian access within the area.

Omnitrans Route 82 provides transit service along Milliken Avenue at the Jersey Boulevard intersection.

Consistent with the Sustainable Community Action Plan, the project would facilitate use of an underutilized industrial site located in proximity to alternative transportation options. Based on these project characteristics, the project supports applicable Sustainable Community Action Plan policies intended to reduce GHG emissions generated within the City of Rancho Cucamonga.

#### Connect SoCal 2020-2045 RTP/SCS Consistency

Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG emission reduction goals and federal Clean Air Act requirements. The Project would be developed within an industrial zone in the City of Ranch Cucamonga and utilize the existing street network. The project would not conflict with plans to integrate the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The Project would be consistent with or otherwise would not conflict with any of the goals identified in *Connect SoCal*.

#### SB 32/2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction in GHG emissions below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 14, 2017 Scoping Plan Consistency Summary, summarizes the Project's consistency with the 2017 Scoping Plan. As stated, the Project would not conflict with any of the Scoping Plan actions.

Table 14
2017 Scoping Plan Consistency Summary

Action	Popposible Portice				
ACTION	Responsible Parties	Consistency			
Implement SB 350 by 2030					
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.		No Conflict. The Project would most likely use energy from Southern California Edison (SCE); however, the Rancho Cucamonga Municipal Utility may serve the site. Both utilities have committed to diversify their portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE or RCMU energy source diversification efforts.			
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.  Reduce GHG emissions in the electricity sector through the implementation of the above	CPUC, CEC, CARB	No Conflict. The Project would be constructed in compliance with current California Building Code requirements including the 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standard requirements.			

measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Loadserving entities and publicly-owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		
At least 1.5 million zero emission	ile Source Strategy (Cleaner Techno	logy and Fuels)  No Conflict. This is a CARB Mobile
and plugin hybrid light-duty EVs by 2025.		Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2025 targets. As this is a CARB enforced standard, vehicles that access the Project must comply with the standards as applicable; and thus, would comply with the strategy.
At least 4.2 million zero emission and plugin hybrid light-duty EVs by 2030.	CARB, California State	No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty EV 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.	Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.
Medium- and Heavy-Duty GHG Phase 2.		No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options.  Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard.		Not applicable. This measure is not related to the project scope.
Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3-7 truck sales in local fleets starting in 2020, increasing to 10%		No Conflict. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.

		,
in 2025 and remaining flat through 2030.		
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."		No Conflict. As stated in Section 4.9 of this EIR, the Project's VMT impact would be considered less than significant based on the City's Low VMT Area screening threshold.
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	No Conflict. The project would not exceed SCAQMD GHG emission standards for industrial sources or otherwise conflict with GHG reduction efforts.
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GOBiz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	No Conflict. The project would not conflict with use of adjacent streets by pedestrians or bicycles. Further, transit service provided by Omnitrans would not be affected by the project. The Rancho Cucamonga Metrolink station is located approximately 0.25 miles south of the site. Access to/from the Metrolink station for transit users would not be affected.
By 2019, develop pricing policies to support low-GHG transportation (e.g., low emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	<b>Not applicable</b> . This measure is not related to the project scope.
	ent California Sustainable Freight Act	
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	No Conflict. This measure would apply to all trucks accessing the Project site. It is presumed that these vehicles would be part of the statewide goods movement sector. Access to the Project site would be provided from Milliken Avenue, a designated truck route in the City of Ranch Cucamonga.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near zero emission freight vehicles and equipment powered by renewable energy by 2030.		Not applicable. This measure is unrelated to the project scope.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	No Conflict. When adopted, this measure would apply to all fuel purchased for use in vehicles accessing the project site. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.
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40% reduction in methane and hydrofluorocarbon emissions below	CARB, CalRecycle, CDFA, California State Water Resource	<b>No Conflict.</b> The Project would be required to comply with this
2013	Control Board (SWRCB), Local Air	measure and reduce any Project-
levels.	Districts	source SLPS emissions
		accordingly. The Project would not
		obstruct or interfere with agency
		efforts to reduce SLPS emissions.
Implement the post-2020 Cap-and-	CARB	No Conflict. The Project would be
Trade Program with declining		required to comply with any
annual caps.		applicable Cap-and-Trade Program
		provisions. The Project would not
		obstruct or interfere agency efforts
		to implement the post-2020
		Cap-and-Trade Program.
By 2018, develop Integrated Natu	ral and Working Lands Implementation	on Plan to secure California's land
	base as a net carbon sink:	
Protect land from conversion	CNRA, Departments	Not applicable. The Project site is
through conservation easements	Within CDFA, CalEPA,	not an identified property that needs
and other incentives.	CARB	to be conserved.
Increase the long-term resilience of		Not applicable. The entire site is
carbon storage in the land base and		planned for development.
enhance sequestration capacity		
Utilize wood and agricultural		No Conflict. To the extent
products to increase the amount of		appropriate for the proposed
carbon stored in the natural and		industrial buildings, wood products
built environments		would be used in construction,
		including roof structure. Additionally,
E CUE L C C C		the Project includes landscaping.
Establish scenario projections to		Not applicable. This measure is
serve as the foundation for the		unrelated to the project scope.
Implementation Plan	ONDA Califarraia	Not and back This was a
Implement Forest Carbon Plan	CNRA, California	Not applicable. This measure is
	Department of Forestry and Fire	unrelated to the project scope.
	Protection (CAL FIRE), CalEPA and	
Identify and arm and for disc.	Departments Within	Not and back This was a
Identify and expand funding and	State Agencies & Local Agencies	Not applicable. This measure is
financing mechanisms to support		unrelated to the project scope.
GHG reductions across all sectors.		

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Appendix A
Appendix A  CalEEMod Air Quality and Greenhouse Gas Emissions Model Results –  Summer/Annual, and N <sub>2</sub> O from Mobile Emissions Sources
Appendix A  CalEEMod Air Quality and Greenhouse Gas Emissions Model Results –  Summer/Annual, and N <sub>2</sub> O from Mobile Emissions Sources
CalEEMod Air Quality and Greenhouse Gas Emissions Model Results -
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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

## **Jersey Industrial Complex LDV**

#### San Bernardino-South Coast County, Summer

## 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	159.58	1000sqft	3.66	159,580.00	0
Parking Lot	110.00	Space	0.99	44,000.00	0

Precipitation Freq (Days)

(lb/MWhr)

32

#### 1.2 Other Project Characteristics

Urban

Climate Zone	10		Operational Year	2023	
Utility Company	Southern Californ	ia Edison			
CO2 Intensity	390.98	CH4 Intensity	0.033	N2O Intensity	0.004

2.2

Wind Speed (m/s)

(lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Urbanization

(lb/MWhr)

Vehicle Trips - Defaults modified to refelct 1.1 trips/1,000 SF for light duty vehicles assuming 16.6 miles trip and 100% primary home/work

Fleet Mix - Fleet mix modified to reflect light/duty passenger vehicle use.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Construction Phase - Arch Coating Phase modified to overlap with building construction

## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

## 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
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	PhaseEndDate	8/25/2023	7/6/2023
tblConstructionPhase	PhaseStartDate	8/2/2023	5/6/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.54	0.62
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.17	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.13
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.10
tblVehicleTrips	SU_TR	1.74	1.10
tblVehicleTrips	WD_TR	1.74	1.10

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

# 2.0 Emissions Summary

# 2.1 Overall Construction (Maximum Daily Emission)

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2022	3.2464	33.1318	21.2112	0.0420	19.8582	1.6136	21.4718	10.1558	1.4845	11.6404	0.0000	4,111.384 1	4,111.384 1	1.1971	0.1202	4,163.524 7
2023	36.1043	17.0882	22.4146	0.0461	1.3627	0.7849	2.1476	0.3662	0.7428	1.1090	0.0000	4,509.269 6	4,509.269 6	0.6664	0.1183	4,561.173 5
Maximum	36.1043	33.1318	22.4146	0.0461	19.8582	1.6136	21.4718	10.1558	1.4845	11.6404	0.0000	4,509.269 6	4,509.269 6	1.1971	0.1202	4,561.173 5

# **Mitigated Construction**

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
2022	3.2464	33.1318	21.2112	0.0420	9.0469	1.6136	10.6605	4.5995	1.4845	6.0840	0.0000	4,111.384 1	4,111.384 1	1.1971	0.1202	4,163.524 7
2023	36.1043	17.0882	22.4146	0.0461	1.3627	0.7849	2.1476	0.3662	0.7428	1.1090	0.0000	4,509.269 6	4,509.269 6	0.6664	0.1183	4,561.173 5
Maximum	36.1043	33.1318	22.4146	0.0461	9.0469	1.6136	10.6605	4.5995	1.4845	6.0840	0.0000	4,509.269 6	4,509.269 6	1.1971	0.1202	4,561.173 5

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

	ROG	NOx	СО	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	50.95	0.00	45.77	52.81	0.00	43.58	0.00	0.00	0.00	0.00	0.00	0.00

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Area	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
""	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Mobile	0.3549	0.4015	6.5876	0.0200	2.2138	9.9500e- 003	2.2237	0.5868	9.1700e- 003	0.5960		2,022.913 8	2,022.913 8	0.0410	0.0445	2,037.192 6
Total	3.9508	0.4879	6.6874	0.0205	2.2138	0.0166	2.2304	0.5868	0.0158	0.6027		2,126.359 0	2,126.359 0	0.0432	0.0464	2,141.256 1

## **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Area	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Energy	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Mobile	0.3549	0.4015	6.5876	0.0200	2.2138	9.9500e- 003	2.2237	0.5868	9.1700e- 003	0.5960		2,022.913 8	2,022.913 8	0.0410	0.0445	2,037.192 6
Total	3.9508	0.4879	6.6874	0.0205	2.2138	0.0166	2.2304	0.5868	0.0158	0.6027		2,126.359 0	2,126.359 0	0.0432	0.0464	2,141.256 1

## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

	ROG	NOx	СО	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	7/5/2022	8/1/2022	5	20	
2	Site Preparation	Site Preparation	8/2/2022	8/8/2022	5	5	
3	Grading	Grading	8/9/2022	8/18/2022	5	8	
4	Building Construction	Building Construction	8/19/2022	7/6/2023	5	230	
5	Paving	Paving	7/7/2023	8/1/2023	5	18	
6	Architectural Coating	Architectural Coating	5/6/2023	7/6/2023	5	44	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 239,370; Non-Residential Outdoor: 79,790; Striped Parking Area: 2,640 (Architectural Coating – sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3:	8.00	158	0.38

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

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

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	86.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

3.2 Demolition - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

3.2 Demolition - 2022

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427	1 1 1	1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

# **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/d	day							lb/d	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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

## 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/d	day							lb/d	lay		
Fugitive Dust	) 				19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	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	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310
Total	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

## 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922	       	3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310
Total	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

3.4 Grading - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289	       	2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

## **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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## Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

## 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/d	day							lb/c	day		
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289	       	2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	3.1872	0.9409	4.1280	1.5411	0.8656	2.4067	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

# 3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632

# **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0575	1.4451	0.5303	6.1600e- 003	0.2114	0.0172	0.2286	0.0609	0.0165	0.0773		660.2272	660.2272	0.0178	0.0977	689.7886	
Worker	0.3641	0.2306	3.5379	8.8700e- 003	0.9613	5.0400e- 003	0.9663	0.2549	4.6400e- 003	0.2596		896.8234	896.8234	0.0235	0.0225	904.1039	
Total	0.4216	1.6757	4.0682	0.0150	1.1727	0.0222	1.1949	0.3158	0.0211	0.3369		1,557.050 5	1,557.050 5	0.0413	0.1202	1,593.892 5	

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

## 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						
	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

## **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0575	1.4451	0.5303	6.1600e- 003	0.2114	0.0172	0.2286	0.0609	0.0165	0.0773		660.2272	660.2272	0.0178	0.0977	689.7886	
Worker	0.3641	0.2306	3.5379	8.8700e- 003	0.9613	5.0400e- 003	0.9663	0.2549	4.6400e- 003	0.2596		896.8234	896.8234	0.0235	0.0225	904.1039	
Total	0.4216	1.6757	4.0682	0.0150	1.1727	0.0222	1.1949	0.3158	0.0211	0.3369		1,557.050 5	1,557.050 5	0.0413	0.1202	1,593.892 5	

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0386	1.1575	0.4857	5.9100e- 003	0.2114	8.7000e- 003	0.2201	0.0609	8.3200e- 003	0.0692		633.3300	633.3300	0.0166	0.0935	661.6144
Worker	0.3361	0.2028	3.2344	8.5900e- 003	0.9613	4.7300e- 003	0.9660	0.2549	4.3600e- 003	0.2593		867.7497	867.7497	0.0210	0.0207	874.4314
Total	0.3747	1.3603	3.7201	0.0145	1.1727	0.0134	1.1861	0.3158	0.0127	0.3285		1,501.079 7	1,501.079 7	0.0375	0.1142	1,536.045 8

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0386	1.1575	0.4857	5.9100e- 003	0.2114	8.7000e- 003	0.2201	0.0609	8.3200e- 003	0.0692		633.3300	633.3300	0.0166	0.0935	661.6144
Worker	0.3361	0.2028	3.2344	8.5900e- 003	0.9613	4.7300e- 003	0.9660	0.2549	4.3600e- 003	0.2593		867.7497	867.7497	0.0210	0.0207	874.4314
Total	0.3747	1.3603	3.7201	0.0145	1.1727	0.0134	1.1861	0.3158	0.0127	0.3285		1,501.079 7	1,501.079 7	0.0375	0.1142	1,536.045 8

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### Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

3.6 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.430 4	1,805.430 4	0.5673		1,819.612 2
Paving	0.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0622	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.430 4	1,805.430 4	0.5673		1,819.612 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561
Total	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561

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### Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

3.6 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.430 4	1,805.430 4	0.5673		1,819.612 2
Paving	0.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0622	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.430 4	1,805.430 4	0.5673		1,819.612 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day 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	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561
Total	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561

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### Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

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

# 3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	33.8987					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	34.0904	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527
Total	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527

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### Jersey Industrial Complex LDV - San Bernardino-South Coast County, Summer

### 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/d	day							lb/d	day		
Archit. Coating	33.8987					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708	1	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168	1 1 1	281.8690
Total	34.0904	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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527
Total	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527

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### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	0.3549	0.4015	6.5876	0.0200	2.2138	9.9500e- 003	2.2237	0.5868	9.1700e- 003	0.5960		2,022.913 8	2,022.913 8	0.0410	0.0445	2,037.192 6
Unmitigated	0.3549	0.4015	6.5876	0.0200	2.2138	9.9500e- 003	2.2237	0.5868	9.1700e- 003	0.5960		2,022.913 8	2,022.913 8	0.0410	0.0445	2,037.192 6

### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	175.54	175.54	175.54	1,060,671	1,060,671
Total	175.54	175.54	175.54	1,060,671	1,060,671

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	V or C-W H-S or C-C H-O or C-NW			H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	0.00	100.00	0.00	0.00	100	0	0

#### 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
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.624200	0.041100	0.203500	0.131200	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

# 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/d	day							lb/c	lay		
NaturalGas Mitigated	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

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### 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**

	NaturalGa s 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/d	day							lb/c	lay		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	878.783	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Total		9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

#### **Mitigated**

	NaturalGa s 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/d	day							lb/c	day		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.878783	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Total		9.4800e- 003	0.0862	0.0724	5.2000e- 004	-	6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

### 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/d	day							lb/d	day		
Mitigated	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Unmitigated	0.0000	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

### 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	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	. 0.1000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	: "					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5500e- 003	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Total	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

### 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/d	day							lb/d	day		
Coating	0.4086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	3.1753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
' · ·	2.5500e- 003	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Total	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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### 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

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

### **Jersey Industrial Complex HDV**

#### San Bernardino-South Coast County, Summer

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	159.58	1000sqft	3.66	159,580.00	0
Parking Lot	110.00	Space	0.99	44,000.00	0

Precipitation Freq (Days)

(lb/MWhr)

32

#### 1.2 Other Project Characteristics

Urban

Climate Zone	10			Operational Year	2023
Utility Company	Southern Californi	a Edison			
CO2 Intensity	390.98	CH4 Intensity	0.033	N2O Intensity	0.004

2.2

Wind Speed (m/s)

(lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Urbanization

(lb/MWhr)

Vehicle Trips - Defaults modified to refelct 0.64 trips/1,000 SF for HDV vehicles assuming 40 miles per trip and 100% primary C/C trips

Fleet Mix - Fleet mix modified to reflect heavy duty truck use

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Construction Phase - Arch Coating Phase modified to overlap with building construction

### 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
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	PhaseEndDate	8/25/2023	7/6/2023
tblConstructionPhase	PhaseStartDate	8/2/2023	5/6/2023
tblFleetMix	HHD	0.02	0.63
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.17
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblVehicleTrips	CC_TL	8.40	40.00
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	0.64
tblVehicleTrips	SU_TR	1.74	0.64

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

tblVehicleTrips	WD_TR	1.74	0.64

# 2.0 Emissions Summary

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, 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	СО	SO2	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/d	day							lb/c	lay		
2022	3.2464	33.1318	21.2112	0.0420	19.8582	1.6136	21.4718	10.1558	1.4845	11.6404	0.0000	4,111.384 1	4,111.384 1	1.1971	0.1202	4,163.524 7
2023	36.1043	17.0882	22.4146	0.0461	1.3627	0.7849	2.1476	0.3662	0.7428	1.1090	0.0000	4,509.269 6	4,509.269 6	0.6664	0.1183	4,561.173 5
Maximum	36.1043	33.1318	22.4146	0.0461	19.8582	1.6136	21.4718	10.1558	1.4845	11.6404	0.0000	4,509.269 6	4,509.269 6	1.1971	0.1202	4,561.173 5

### **Mitigated Construction**

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
2022	3.2464	33.1318	21.2112	0.0420	9.0469	1.6136	10.6605	4.5995	1.4845	6.0840	0.0000	4,111.384 1	4,111.384 1	1.1971	0.1202	4,163.524 7
2023	36.1043	17.0882	22.4146	0.0461	1.3627	0.7849	2.1476	0.3662	0.7428	1.1090	0.0000	4,509.269 6	4,509.269 6	0.6664	0.1183	4,561.173 5
Maximum	36.1043	33.1318	22.4146	0.0461	9.0469	1.6136	10.6605	4.5995	1.4845	6.0840	0.0000	4,509.269 6	4,509.269 6	1.1971	0.1202	4,561.173 5

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# Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

	ROG	NOx	СО	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	50.95	0.00	45.77	52.81	0.00	43.58	0.00	0.00	0.00	0.00	0.00	0.00

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
""	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Mobile	0.3434	16.6464	4.2675	0.0961	3.6629	0.1817	3.8446	1.0325	0.1738	1.2063		10,358.72 29	10,358.72 29	0.3368	1.5299	10,823.05 38
Total	3.9393	16.7328	4.3674	0.0966	3.6629	0.1884	3.8512	1.0325	0.1805	1.2130		10,462.16 81	10,462.16 81	0.3390	1.5318	10,927.11 73

### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Area	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Energy	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Mobile	0.3434	16.6464	4.2675	0.0961	3.6629	0.1817	3.8446	1.0325	0.1738	1.2063		10,358.72 29	10,358.72 29	0.3368	1.5299	10,823.05 38
Total	3.9393	16.7328	4.3674	0.0966	3.6629	0.1884	3.8512	1.0325	0.1805	1.2130		10,462.16 81	10,462.16 81	0.3390	1.5318	10,927.11 73

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

	ROG	NOx	СО	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	7/5/2022	8/1/2022	5	20	
2	Site Preparation	Site Preparation	8/2/2022	8/8/2022	5	5	
3	Grading	Grading	8/9/2022	8/18/2022	5	8	
4	Building Construction	Building Construction	8/19/2022	7/6/2023	5	230	
5	Paving	Paving	7/7/2023	8/1/2023	5	18	
6	Architectural Coating	Architectural Coating	5/6/2023	7/6/2023	5	44	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 239,370; Non-Residential Outdoor: 79,790; Striped Parking Area: 2,640 (Architectural Coating – sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38

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

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

# **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	86.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.2 Demolition - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
- Cil rioda	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.2 Demolition - 2022

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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/d	day							lb/d	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310
Total	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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/d	day							lb/d	lay		
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380	 	1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	8.8457	1.6126	10.4582	4.5461	1.4836	6.0297	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310
Total	0.0762	0.0483	0.7405	1.8600e- 003	0.2012	1.0500e- 003	0.2023	0.0534	9.7000e- 004	0.0543		187.7072	187.7072	4.9100e- 003	4.7000e- 003	189.2310

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.4 Grading - 2022

<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	 				7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297	 	0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289	i i	2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.4 Grading - 2022

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	 				3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	3.1872	0.9409	4.1280	1.5411	0.8656	2.4067	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925
Total	0.0635	0.0402	0.6171	1.5500e- 003	0.1677	8.8000e- 004	0.1685	0.0445	8.1000e- 004	0.0453		156.4227	156.4227	4.0900e- 003	3.9200e- 003	157.6925

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

# 3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0575	1.4451	0.5303	6.1600e- 003	0.2114	0.0172	0.2286	0.0609	0.0165	0.0773		660.2272	660.2272	0.0178	0.0977	689.7886
Worker	0.3641	0.2306	3.5379	8.8700e- 003	0.9613	5.0400e- 003	0.9663	0.2549	4.6400e- 003	0.2596		896.8234	896.8234	0.0235	0.0225	904.1039
Total	0.4216	1.6757	4.0682	0.0150	1.1727	0.0222	1.1949	0.3158	0.0211	0.3369		1,557.050 5	1,557.050 5	0.0413	0.1202	1,593.892 5

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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/d	day							lb/d	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0575	1.4451	0.5303	6.1600e- 003	0.2114	0.0172	0.2286	0.0609	0.0165	0.0773		660.2272	660.2272	0.0178	0.0977	689.7886
Worker	0.3641	0.2306	3.5379	8.8700e- 003	0.9613	5.0400e- 003	0.9663	0.2549	4.6400e- 003	0.2596		896.8234	896.8234	0.0235	0.0225	904.1039
Total	0.4216	1.6757	4.0682	0.0150	1.1727	0.0222	1.1949	0.3158	0.0211	0.3369		1,557.050 5	1,557.050 5	0.0413	0.1202	1,593.892 5

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0386	1.1575	0.4857	5.9100e- 003	0.2114	8.7000e- 003	0.2201	0.0609	8.3200e- 003	0.0692		633.3300	633.3300	0.0166	0.0935	661.6144
Worker	0.3361	0.2028	3.2344	8.5900e- 003	0.9613	4.7300e- 003	0.9660	0.2549	4.3600e- 003	0.2593		867.7497	867.7497	0.0210	0.0207	874.4314
Total	0.3747	1.3603	3.7201	0.0145	1.1727	0.0134	1.1861	0.3158	0.0127	0.3285		1,501.079 7	1,501.079 7	0.0375	0.1142	1,536.045 8

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0386	1.1575	0.4857	5.9100e- 003	0.2114	8.7000e- 003	0.2201	0.0609	8.3200e- 003	0.0692		633.3300	633.3300	0.0166	0.0935	661.6144
Worker	0.3361	0.2028	3.2344	8.5900e- 003	0.9613	4.7300e- 003	0.9660	0.2549	4.3600e- 003	0.2593		867.7497	867.7497	0.0210	0.0207	874.4314
Total	0.3747	1.3603	3.7201	0.0145	1.1727	0.0134	1.1861	0.3158	0.0127	0.3285		1,501.079 7	1,501.079 7	0.0375	0.1142	1,536.045 8

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.6 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.430 4	1,805.430 4	0.5673		1,819.612 2
Paving	0.1441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0622	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.430 4	1,805.430 4	0.5673		1,819.612 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561
Total	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

3.6 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.430 4	1,805.430 4	0.5673		1,819.612 2
Paving	0.1441	 	]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0622	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.430 4	1,805.430 4	0.5673		1,819.612 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561
Total	0.0782	0.0472	0.7522	2.0000e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

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

# 3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	33.8987					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	34.0904	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527
Total	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	33.8987					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	34.0904	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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	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	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527
Total	0.0664	0.0401	0.6394	1.7000e- 003	0.1900	9.4000e- 004	0.1910	0.0504	8.6000e- 004	0.0513		171.5319	171.5319	4.1500e- 003	4.0800e- 003	172.8527

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Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day											lb/c	lay		
Mitigated	0.3434	16.6464	4.2675	0.0961	3.6629	0.1817	3.8446	1.0325	0.1738	1.2063		10,358.72 29	10,358.72 29	0.3368	1.5299	10,823.05 38
Unmitigated	0.3434	16.6464	4.2675	0.0961	3.6629	0.1817	3.8446	1.0325	0.1738	1.2063		10,358.72 29	10,358.72 29	0.3368	1.5299	10,823.05 38

### **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	102.13	102.13	102.13	1,487,030	1,487,030
Total	102.13	102.13	102.13	1,487,030	1,487,030

### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	40.00	0.00	0.00	100.00	0.00	100	0	0

#### 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
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.165800	0.208600	0.625600	0.000000	0.000000	0.000000	0.000000	0.000000

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
NaturalGas Unmitigated	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

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Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

#### 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**

	NaturalGa s 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/d	day							lb/c	day		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	878.783	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003	 	6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Total		9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

# **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/d	lay		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.878783	9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006
Total		9.4800e- 003	0.0862	0.0724	5.2000e- 004		6.5500e- 003	6.5500e- 003		6.5500e- 003	6.5500e- 003		103.3862	103.3862	1.9800e- 003	1.9000e- 003	104.0006

#### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Unmitigated	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004	 	1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

#### 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	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	. 0.1000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	: "					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5500e- 003	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Total	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

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Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

#### 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	y Ib/day Ib								lb/d	day						
Coating	0.4086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	3.1753					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
' · ·	2.5500e- 003	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629
Total	3.5865	2.5000e- 004	0.0275	0.0000		1.0000e- 004	1.0000e- 004		1.0000e- 004	1.0000e- 004		0.0590	0.0590	1.5000e- 004		0.0629

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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Jersey Industrial Complex HDV - San Bernardino-South Coast County, Summer

#### 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

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Jersey Industrial Complex LDV - San Bernardino-South Coast County, Annual

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

#### **Jersey Industrial Complex LDV**

#### San Bernardino-South Coast County, Annual

# 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	159.58	1000sqft	3.66	159,580.00	0
Parking Lot	110.00	Space	0.99	44,000.00	0

Precipitation Freq (Days)

32

#### 1.2 Other Project Characteristics

Urban

Climate Zone	10			Operational Year	2023
Utility Company	Southern California E	Edison			
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

2.2

Wind Speed (m/s)

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Urbanization

Vehicle Trips - Defaults modified to refelct 1.1 trips/1,000 SF for light duty vehicles assuming 16.6 miles trip and 100% primary home/work

Fleet Mix - Fleet mix modified to reflect light/duty passenger vehicle use.

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Construction Phase - Arch Coating Phase modified to overlap with building construction

#### 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
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	18.00	44.00
tblConstructionPhase	PhaseEndDate	8/25/2023	7/6/2023
tblConstructionPhase	PhaseStartDate	8/2/2023	5/6/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.54	0.62
tblFleetMix	LDT1	0.06	0.04
tblFleetMix	LDT2	0.17	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.13
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	1.10
tblVehicleTrips	SU_TR	1.74	1.10
tblVehicleTrips	WD_TR	1.74	1.10

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

# 2.0 Emissions Summary

#### 2.1 Overall Construction

**Unmitigated Construction** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2022	0.1432	1.2588	1.2829	2.6100e- 003	0.1355	0.0601	0.1957	0.0546	0.0563	0.1109	0.0000	231.0649	231.0649	0.0441	5.3700e- 003	233.7680
2023	0.8894	1.1696	1.4759	3.0200e- 003	0.0832	0.0533	0.1365	0.0224	0.0502	0.0726	0.0000	267.6188	267.6188	0.0443	7.1600e- 003	270.8615
Maximum	0.8894	1.2588	1.4759	3.0200e- 003	0.1355	0.0601	0.1957	0.0546	0.0563	0.1109	0.0000	267.6188	267.6188	0.0443	7.1600e- 003	270.8615

# **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					ton	s/yr							MT	/yr		
2022	0.1432	1.2588	1.2829	2.6100e- 003	0.0929	0.0601	0.1531	0.0332	0.0563	0.0895	0.0000	231.0647	231.0647	0.0441	5.3700e- 003	233.7678
2023	0.8894	1.1696	1.4759	3.0200e- 003	0.0832	0.0533	0.1365	0.0224	0.0502	0.0726	0.0000	267.6186	267.6186	0.0443	7.1600e- 003	270.8613
Maximum	0.8894	1.2588	1.4759	3.0200e- 003	0.0929	0.0601	0.1531	0.0332	0.0563	0.0895	0.0000	267.6186	267.6186	0.0443	7.1600e- 003	270.8613

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

	ROG	NOx	СО	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	19.48	0.00	12.83	27.81	0.00	11.68	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-5-2022	10-4-2022	0.7834	0.7834
2	10-5-2022	1-4-2023	0.6378	0.6378
3	1-5-2023	4-4-2023	0.5705	0.5705
4	4-5-2023	7-4-2023	1.3357	1.3357
5	7-5-2023	9-30-2023	0.1306	0.1306
		Highest	1.3357	1.3357

# 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					ton	s/yr							MT	/yr		
Area	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Energy	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	85.5057	85.5057	6.1000e- 003	1.0100e- 003	85.9603
Mobile	0.0538	0.0803	1.0317	3.3700e- 003	0.3952	1.8100e- 003	0.3970	0.1049	1.6700e- 003	0.1066	0.0000	308.6959	308.6959	6.8600e- 003	7.8000e- 003	311.1917
Waste	  	,				0.0000	0.0000		0.0000	0.0000	30.4507	0.0000	30.4507	1.7996	0.0000	75.4403
Water	#,	,			<del></del>	0.0000	0.0000		0.0000	0.0000	11.7076	85.2167	96.9243	1.2097	0.0293	135.8871
Total	0.7099	0.0960	1.0484	3.4600e- 003	0.3952	3.0100e- 003	0.3982	0.1049	2.8700e- 003	0.1078	42.1583	479.4250	521.5833	3.0222	0.0381	608.4865

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

# 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Energy	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	85.5057	85.5057	6.1000e- 003	1.0100e- 003	85.9603
Mobile	0.0538	0.0803	1.0317	3.3700e- 003	0.3952	1.8100e- 003	0.3970	0.1049	1.6700e- 003	0.1066	0.0000	308.6959	308.6959	6.8600e- 003	7.8000e- 003	311.1917
Waste	n					0.0000	0.0000		0.0000	0.0000	7.6127	0.0000	7.6127	0.4499	0.0000	18.8601
Water	n		]		<del></del>	0.0000	0.0000	<del></del>	0.0000	0.0000	9.3661	68.1734	77.5394	0.9677	0.0234	108.7097
Total	0.7099	0.0960	1.0484	3.4600e- 003	0.3952	3.0100e- 003	0.3982	0.1049	2.8700e- 003	0.1078	16.9787	462.3817	479.3604	1.4306	0.0322	524.7289

	ROG	NOx	СО	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	59.73	3.55	8.10	52.66	15.39	13.76

# 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	7/5/2022	8/1/2022	5	20	
2	Site Preparation	Site Preparation	8/2/2022	8/8/2022	5	5	
3	Grading	Grading	8/9/2022	8/18/2022	5	8	

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4	Building Construction	Building Construction	8/19/2022	7/6/2023	5	230	
	Paving	Paving	7/7/2023	8/1/2023	5	18	
6	Architectural Coating	Architectural Coating	5/6/2023	7/6/2023	5	44	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 239,370; Non-Residential Outdoor: 79,790; Striped Parking Area: 2,640

(Architectural Coating - sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

#### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	86.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 **Demolition - 2022**

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

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#### 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 Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231
Total	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231

# **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					ton	s/yr							MT	/yr		
Off-Road	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

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3.2 Demolition - 2022

#### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231
Total	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231

#### 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e- 003	0.0827	0.0492	1.0000e- 004		4.0300e- 003	4.0300e- 003		3.7100e- 003	3.7100e- 003	0.0000	8.3599	8.3599	2.7000e- 003	0.0000	8.4274
Total	7.9300e- 003	0.0827	0.0492	1.0000e- 004	0.0491	4.0300e- 003	0.0532	0.0253	3.7100e- 003	0.0290	0.0000	8.3599	8.3599	2.7000e- 003	0.0000	8.4274

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#### 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 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
· · · · · ·	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969
Total	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969

# **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					ton	s/yr							МТ	/yr		
Fugitive Dust			i i i	i i	0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
- Oil Roda	7.9300e- 003	0.0827	0.0492	1.0000e- 004		4.0300e- 003	4.0300e- 003		3.7100e- 003	3.7100e- 003	0.0000	8.3598	8.3598	2.7000e- 003	0.0000	8.4274
Total	7.9300e- 003	0.0827	0.0492	1.0000e- 004	0.0221	4.0300e- 003	0.0261	0.0114	3.7100e- 003	0.0151	0.0000	8.3598	8.3598	2.7000e- 003	0.0000	8.4274

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# 3.3 Site Preparation - 2022

#### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969
Total	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969

#### 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e- 003	0.0834	0.0611	1.2000e- 004		3.7600e- 003	3.7600e- 003		3.4600e- 003	3.4600e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062
Total	7.7900e- 003	0.0834	0.0611	1.2000e- 004	0.0283	3.7600e- 003	0.0321	0.0137	3.4600e- 003	0.0172	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062

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3.4 Grading - 2022

#### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292
Total	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292

# **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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0128	0.0000	0.0128	6.1600e- 003	0.0000	6.1600e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	7.7900e- 003	0.0834	0.0611	1.2000e- 004		3.7600e- 003	3.7600e- 003	1	3.4600e- 003	3.4600e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062
Total	7.7900e- 003	0.0834	0.0611	1.2000e- 004	0.0128	3.7600e- 003	0.0165	6.1600e- 003	3.4600e- 003	9.6200e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062

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#### 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 Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292
Total	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292

#### 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					ton	s/yr							MT	/yr		
Off-Road	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2281	111.2281	0.0267	0.0000	111.8943
Total	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2281	111.2281	0.0267	0.0000	111.8943

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

# 3.5 Building Construction - 2022 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e- 003	0.0730	0.0259	3.0000e- 004	9.9900e- 003	8.3000e- 004	0.0108	2.8800e- 003	7.9000e- 004	3.6700e- 003	0.0000	28.7629	28.7629	7.8000e- 004	4.2600e- 003	30.0516
Worker	0.0156	0.0122	0.1463	3.9000e- 004	0.0453	2.4000e- 004	0.0455	0.0120	2.2000e- 004	0.0122	0.0000	36.0736	36.0736	1.0300e- 003	1.0400e- 003	36.4103
Total	0.0183	0.0852	0.1722	6.9000e- 004	0.0553	1.0700e- 003	0.0563	0.0149	1.0100e- 003	0.0159	0.0000	64.8364	64.8364	1.8100e- 003	5.3000e- 003	66.4620

#### **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					ton	s/yr							MT	/yr		
Off-Road	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2280	111.2280	0.0267	0.0000	111.8942
Total	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2280	111.2280	0.0267	0.0000	111.8942

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#### 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 Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e- 003	0.0730	0.0259	3.0000e- 004	9.9900e- 003	8.3000e- 004	0.0108	2.8800e- 003	7.9000e- 004	3.6700e- 003	0.0000	28.7629	28.7629	7.8000e- 004	4.2600e- 003	30.0516
Worker	0.0156	0.0122	0.1463	3.9000e- 004	0.0453	2.4000e- 004	0.0455	0.0120	2.2000e- 004	0.0122	0.0000	36.0736	36.0736	1.0300e- 003	1.0400e- 003	36.4103
Total	0.0183	0.0852	0.1722	6.9000e- 004	0.0553	1.0700e- 003	0.0563	0.0149	1.0100e- 003	0.0159	0.0000	64.8364	64.8364	1.8100e- 003	5.3000e- 003	66.4620

# 3.5 Building Construction - 2023

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3092	155.3092	0.0370	0.0000	156.2328
Total	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3092	155.3092	0.0370	0.0000	156.2328

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

# 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e- 003	0.0816	0.0330	4.0000e- 004	0.0139	5.8000e- 004	0.0145	4.0200e- 003	5.6000e- 004	4.5800e- 003	0.0000	38.5340	38.5340	1.0000e- 003	5.6900e- 003	40.2561
Worker	0.0201	0.0150	0.1870	5.3000e- 004	0.0632	3.2000e- 004	0.0635	0.0168	2.9000e- 004	0.0171	0.0000	48.7323	48.7323	1.3000e- 003	1.3400e- 003	49.1636
Total	0.0226	0.0965	0.2200	9.3000e- 004	0.0771	9.0000e- 004	0.0780	0.0208	8.5000e- 004	0.0217	0.0000	87.2663	87.2663	2.3000e- 003	7.0300e- 003	89.4197

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469	 	0.0441	0.0441	0.0000	155.3090	155.3090	0.0370	0.0000	156.2326
Total	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3090	155.3090	0.0370	0.0000	156.2326

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#### 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 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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e- 003	0.0816	0.0330	4.0000e- 004	0.0139	5.8000e- 004	0.0145	4.0200e- 003	5.6000e- 004	4.5800e- 003	0.0000	38.5340	38.5340	1.0000e- 003	5.6900e- 003	40.2561
Worker	0.0201	0.0150	0.1870	5.3000e- 004	0.0632	3.2000e- 004	0.0635	0.0168	2.9000e- 004	0.0171	0.0000	48.7323	48.7323	1.3000e- 003	1.3400e- 003	49.1636
Total	0.0226	0.0965	0.2200	9.3000e- 004	0.0771	9.0000e- 004	0.0780	0.0208	8.5000e- 004	0.0217	0.0000	87.2663	87.2663	2.3000e- 003	7.0300e- 003	89.4197

# 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					ton	s/yr							МТ	/yr		
	8.2600e- 003	0.0791	0.1097	1.7000e- 004	_	3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565
Paving	1.3000e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5600e- 003	0.0791	0.1097	1.7000e- 004		3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358
Total	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358

# **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					ton	s/yr							MT	/yr		
	8.2600e- 003	0.0791	0.1097	1.7000e- 004		3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565
	1.3000e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5600e- 003	0.0791	0.1097	1.7000e- 004		3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565

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

3.6 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358
Total	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358

# 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					ton	s/yr							MT	/yr		
Archit. Coating	0.7458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e- 003	0.0287	0.0398	7.0000e- 005	 	1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256
Total	0.7500	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256

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

# 3.7 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911
Total	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911

#### **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					ton	s/yr							МТ	/yr		
Archit. Coating	0.7458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	4.2200e- 003	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003	       	1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256
Total	0.7500	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256

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#### 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 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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911
Total	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0538	0.0803	1.0317	3.3700e- 003	0.3952	1.8100e- 003	0.3970	0.1049	1.6700e- 003	0.1066	0.0000	308.6959	308.6959	6.8600e- 003	7.8000e- 003	311.1917
Unmitigated	0.0538	0.0803	1.0317	3.3700e- 003	0.3952	1.8100e- 003	0.3970	0.1049	1.6700e- 003	0.1066	0.0000	308.6959	308.6959	6.8600e- 003	7.8000e- 003	311.1917

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	175.54	175.54	175.54	1,060,671	1,060,671
Total	175.54	175.54	175.54	1,060,671	1,060,671

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	0.00	100.00	0.00	0.00	100	0	0

# 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.624200	0.041100	0.203500	0.131200	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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

# 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					ton	s/yr							MT	/yr		
Electricity Mitigated	 					0.0000	0.0000		0.0000	0.0000	0.0000	68.3890	68.3890	5.7700e- 003	7.0000e- 004	68.7418
Electricity Unmitigated	,,		       			0.0000	0.0000		0.0000	0.0000	0.0000	68.3890	68.3890	5.7700e- 003	7.0000e- 004	68.7418
NaturalGas Mitigated	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003	<del></del>   	1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
NaturalGas Unmitigated	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

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#### 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**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	320756	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
Total		1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

#### **Mitigated**

	NaturalGa s 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	nd Use kBTU/yr tons/yr tons/yr MT/yr																
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	320756	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
Total		1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

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

# 5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	15400	2.7311	2.3000e- 004	3.0000e- 005	2.7452
Unrefrigerated Warehouse-No Rail	370226	65.6579	5.5400e- 003	6.7000e- 004	65.9966
Total		68.3890	5.7700e- 003	7.0000e- 004	68.7418

# **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	15400	2.7311	2.3000e- 004	3.0000e- 005	2.7452
Unrefrigerated Warehouse-No Rail	370226	65.6579	5.5400e- 003	6.7000e- 004	65.9966
Total		68.3890	5.7700e- 003	7.0000e- 004	68.7418

#### 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					ton	s/yr							MT	/yr		
Mitigated	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Unmitigated	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e- 004	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Total	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003

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#### 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	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Coating	0.0746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.5795		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e- 004	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Total	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
ga.cu	77.5394	0.9677	0.0234	108.7097
Cimingatou	96.9243	1.2097	0.0293	135.8871

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	36.9029 / 0	96.9243	1.2097	0.0293	135.8871
Total		96.9243	1.2097	0.0293	135.8871

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

#### 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.5223 / 0	77.5394	0.9677	0.0234	108.7097
Total		77.5394	0.9677	0.0234	108.7097

#### 8.0 Waste Detail

#### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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

### Category/Year

	Total CO2	CH4	N2O	CO2e					
	MT/yr								
· · · · · · · · · · · · · · · · · · ·	7.6127	0.4499	0.0000	18.8601					
Jgatea	30.4507	1.7996	0.0000	75.4403					

## 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	150.01	30.4507	1.7996	0.0000	75.4403
Total		30.4507	1.7996	0.0000	75.4403

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

### 8.2 Waste by Land Use

### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	37.5025	7.6127	0.4499	0.0000	18.8601			
Total		7.6127	0.4499	0.0000	18.8601			

## 9.0 Operational Offroad

|--|

## **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
= 40.10.11 1 ) p 0	

### 11.0 Vegetation

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

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Jersey Industrial Complex HDV - San Bernardino-South Coast County, Annual

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

### **Jersey Industrial Complex HDV**

#### San Bernardino-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	159.58	1000sqft	3.66	159,580.00	0
Parking Lot	110.00	Space	0.99	44,000.00	0

Precipitation Freq (Days)

32

#### 1.2 Other Project Characteristics

Urban

Climate Zone	10			Operational Year	2023
Utility Company	Southern California E	dison			
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (Ib/MWhr)	0.004

2.2

Wind Speed (m/s)

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Urbanization

Vehicle Trips - Defaults modified to refelct 0.64 trips/1,000 SF for HDV vehicles assuming 40 miles per trip and 100% primary C/C trips

Fleet Mix - Fleet mix modified to reflect heavy duty truck use

Construction Off-road Equipment Mitigation -

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Construction Phase - Arch Coating Phase modified to overlap with building construction

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### 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	
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True	
tblConstructionPhase	NumDays	18.00	44.00	
tblConstructionPhase	PhaseEndDate	8/25/2023	7/6/2023	
tblConstructionPhase	PhaseStartDate	8/2/2023	5/6/2023	
tblFleetMix	HHD	0.02	0.63	
tblFleetMix	LDA	0.54	0.00	
tblFleetMix	LDT1	0.06	0.00	
tblFleetMix	LDT2	0.17	0.00	
tblFleetMix	LHD1	0.03	0.00	
tblFleetMix	LHD2	7.1960e-003	0.17	
tblFleetMix	MCY	0.03	0.00	
tblFleetMix	MDV	0.14	0.00	
tblFleetMix	MH	5.0710e-003	0.00	
tblFleetMix	MHD	0.01	0.21	
tblFleetMix	OBUS	5.5900e-004	0.00	
tblFleetMix	SBUS	9.5400e-004	0.00	
tblFleetMix	UBUS	2.5400e-004	0.00	
tblVehicleTrips	CC_TL	8.40	40.00	
tblVehicleTrips	CC_TTP	0.00	100.00	
tblVehicleTrips	CNW_TL	6.90	0.00	
tblVehicleTrips	CNW_TTP	41.00	0.00	
tblVehicleTrips	CW_TL	16.60	0.00	
tblVehicleTrips	CW_TTP	59.00	0.00	
tblVehicleTrips	DV_TP	5.00	0.00	
tblVehicleTrips	PB_TP	3.00	0.00	
tblVehicleTrips	PR_TP	92.00	100.00	
tblVehicleTrips	ST_TR	1.74	0.64	
tblVehicleTrips	SU_TR	1.74	0.64	

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

O. D. C. D. C. L. T. C	WD TR	4.74	0.04
tbl/ehicle l rips	. WD_IR	1.74	0.64

### 2.0 Emissions Summary

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Annual

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

### 2.1 Overall Construction

### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2022	0.1432	1.2588	1.2829	2.6100e- 003	0.1355	0.0601	0.1957	0.0546	0.0563	0.1109	0.0000	231.0649	231.0649	0.0441	5.3700e- 003	233.7680
2023	0.8894	1.1696	1.4759	3.0200e- 003	0.0832	0.0533	0.1365	0.0224	0.0502	0.0726	0.0000	267.6188	267.6188	0.0443	7.1600e- 003	270.8615
Maximum	0.8894	1.2588	1.4759	3.0200e- 003	0.1355	0.0601	0.1957	0.0546	0.0563	0.1109	0.0000	267.6188	267.6188	0.0443	7.1600e- 003	270.8615

### **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					ton	s/yr							МТ	/yr		
2022	0.1432	1.2588	1.2829	2.6100e- 003	0.0929	0.0601	0.1531	0.0332	0.0563	0.0895	0.0000	231.0647	231.0647	0.0441	5.3700e- 003	233.7678
2023	0.8894	1.1696	1.4759	3.0200e- 003	0.0832	0.0533	0.1365	0.0224	0.0502	0.0726	0.0000	267.6186	267.6186	0.0443	7.1600e- 003	270.8613
Maximum	0.8894	1.2588	1.4759	3.0200e- 003	0.0929	0.0601	0.1531	0.0332	0.0563	0.0895	0.0000	267.6186	267.6186	0.0443	7.1600e- 003	270.8613

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

	ROG	NOx	СО	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	19.48	0.00	12.83	27.81	0.00	11.68	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-5-2022	10-4-2022	0.7834	0.7834
2	10-5-2022	1-4-2023	0.6378	0.6378
3	1-5-2023	4-4-2023	0.5705	0.5705
4	4-5-2023	7-4-2023	1.3357	1.3357
5	7-5-2023	9-30-2023	0.1306	0.1306
		Highest	1.3357	1.3357

### 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					ton	s/yr							МТ	/yr		
Area	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Energy	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003	, i i	1.1900e- 003	1.1900e- 003	0.0000	85.5057	85.5057	6.1000e- 003	1.0100e- 003	85.9603
Mobile	0.0615	3.2087	0.7773	0.0175	0.6559	0.0330	0.6889	0.1853	0.0316	0.2169	0.0000	1,708.676 3	1,708.676 3	0.0555	0.2525	1,785.320 6
Waste	# <sub>1</sub> 					0.0000	0.0000	,	0.0000	0.0000	30.4507	0.0000	30.4507	1.7996	0.0000	75.4403
Water	#, 				<del></del>	0.0000	0.0000	,	0.0000	0.0000	11.7076	85.2167	96.9243	1.2097	0.0293	135.8871
Total	0.7176	3.2244	0.7939	0.0176	0.6559	0.0342	0.6901	0.1853	0.0328	0.2181	42.1583	1,879.405 4	1,921.563 7	3.0709	0.2828	2,082.615 3

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

### 2.2 Overall Operational

### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category					ton	s/yr					MT/yr						
Area	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003	
Energy	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	85.5057	85.5057	6.1000e- 003	1.0100e- 003	85.9603	
Mobile	0.0615	3.2087	0.7773	0.0175	0.6559	0.0330	0.6889	0.1853	0.0316	0.2169	0.0000	1,708.676 3	1,708.676 3	0.0555	0.2525	1,785.320 6	
Waste	n					0.0000	0.0000		0.0000	0.0000	7.6127	0.0000	7.6127	0.4499	0.0000	18.8601	
Water	n					0.0000	0.0000		0.0000	0.0000	9.3661	68.1734	77.5394	0.9677	0.0234	108.7097	
Total	0.7176	3.2244	0.7939	0.0176	0.6559	0.0342	0.6901	0.1853	0.0328	0.2181	16.9787	1,862.362 1	1,879.340 8	1.4793	0.2770	1,998.857 7	

	ROG	NOx	СО	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	59.73	0.91	2.20	51.83	2.07	4.02

### 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	7/5/2022	8/1/2022	5	20	
2	Site Preparation	Site Preparation	8/2/2022	8/8/2022	5	5	
3	Grading	Grading	8/9/2022	8/18/2022	5	8	

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

		Building Construction	8/19/2022	7/6/2023	5	230	
5	Paving	Paving	7/7/2023	8/1/2023	5	18	
	Architectural Coating	Architectural Coating	5/6/2023	7/6/2023	5	44	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 239,370; Non-Residential Outdoor: 79,790; Striped Parking Area: 2,640 (Architectural Coating – sqft)

#### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	86.00	33.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Water Exposed Area

### 3.2 **Demolition - 2022**

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

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3.2 Demolition - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231
Total	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231

### **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					ton	s/yr							MT	/yr		
Off-Road	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

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3.2 **Demolition - 2022** 

### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231
Total	5.7000e- 004	4.4000e- 004	5.3200e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.3108	1.3108	4.0000e- 005	4.0000e- 005	1.3231

### 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9300e- 003	0.0827	0.0492	1.0000e- 004		4.0300e- 003	4.0300e- 003		3.7100e- 003	3.7100e- 003	0.0000	8.3599	8.3599	2.7000e- 003	0.0000	8.4274
Total	7.9300e- 003	0.0827	0.0492	1.0000e- 004	0.0491	4.0300e- 003	0.0532	0.0253	3.7100e- 003	0.0290	0.0000	8.3599	8.3599	2.7000e- 003	0.0000	8.4274

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## 3.3 Site Preparation - 2022

### **Unmitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969
Total	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969

### **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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	7.9300e- 003	0.0827	0.0492	1.0000e- 004		4.0300e- 003	4.0300e- 003		3.7100e- 003	3.7100e- 003	0.0000	8.3598	8.3598	2.7000e- 003	0.0000	8.4274
Total	7.9300e- 003	0.0827	0.0492	1.0000e- 004	0.0221	4.0300e- 003	0.0261	0.0114	3.7100e- 003	0.0151	0.0000	8.3598	8.3598	2.7000e- 003	0.0000	8.4274

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## 3.3 Site Preparation - 2022

### **Mitigated Construction Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969
Total	1.7000e- 004	1.3000e- 004	1.5900e- 003	0.0000	4.9000e- 004	0.0000	5.0000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.3932	0.3932	1.0000e- 005	1.0000e- 005	0.3969

### 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7900e- 003	0.0834	0.0611	1.2000e- 004		3.7600e- 003	3.7600e- 003		3.4600e- 003	3.4600e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062
Total	7.7900e- 003	0.0834	0.0611	1.2000e- 004	0.0283	3.7600e- 003	0.0321	0.0137	3.4600e- 003	0.0172	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062

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### 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 Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292
Total	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292

### **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					ton	s/yr							MT	<sup>-</sup> /yr		
Fugitive Dust					0.0128	0.0000	0.0128	6.1600e- 003	0.0000	6.1600e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	7.7900e- 003	0.0834	0.0611	1.2000e- 004		3.7600e- 003	3.7600e- 003	i i	3.4600e- 003	3.4600e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062
Total	7.7900e- 003	0.0834	0.0611	1.2000e- 004	0.0128	3.7600e- 003	0.0165	6.1600e- 003	3.4600e- 003	9.6200e- 003	0.0000	10.4219	10.4219	3.3700e- 003	0.0000	10.5062

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3.4 Grading - 2022

### **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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292
Total	2.3000e- 004	1.8000e- 004	2.1300e- 003	1.0000e- 005	6.6000e- 004	0.0000	6.6000e- 004	1.7000e- 004	0.0000	1.8000e- 004	0.0000	0.5243	0.5243	2.0000e- 005	2.0000e- 005	0.5292

### 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					ton	s/yr							MT	/yr		
Off-Road	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2281	111.2281	0.0267	0.0000	111.8943
Total	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2281	111.2281	0.0267	0.0000	111.8943

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

## 3.5 Building Construction - 2022 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr						MT	/yr			
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e- 003	0.0730	0.0259	3.0000e- 004	9.9900e- 003	8.3000e- 004	0.0108	2.8800e- 003	7.9000e- 004	3.6700e- 003	0.0000	28.7629	28.7629	7.8000e- 004	4.2600e- 003	30.0516
Worker	0.0156	0.0122	0.1463	3.9000e- 004	0.0453	2.4000e- 004	0.0455	0.0120	2.2000e- 004	0.0122	0.0000	36.0736	36.0736	1.0300e- 003	1.0400e- 003	36.4103
Total	0.0183	0.0852	0.1722	6.9000e- 004	0.0553	1.0700e- 003	0.0563	0.0149	1.0100e- 003	0.0159	0.0000	64.8364	64.8364	1.8100e- 003	5.3000e- 003	66.4620

### **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					ton	s/yr							MT	/yr		
	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388	 	0.0365	0.0365	0.0000	111.2280	111.2280	0.0267	0.0000	111.8942
Total	0.0819	0.7496	0.7854	1.2900e- 003		0.0388	0.0388		0.0365	0.0365	0.0000	111.2280	111.2280	0.0267	0.0000	111.8942

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### 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 Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e- 003	0.0730	0.0259	3.0000e- 004	9.9900e- 003	8.3000e- 004	0.0108	2.8800e- 003	7.9000e- 004	3.6700e- 003	0.0000	28.7629	28.7629	7.8000e- 004	4.2600e- 003	30.0516
Worker	0.0156	0.0122	0.1463	3.9000e- 004	0.0453	2.4000e- 004	0.0455	0.0120	2.2000e- 004	0.0122	0.0000	36.0736	36.0736	1.0300e- 003	1.0400e- 003	36.4103
Total	0.0183	0.0852	0.1722	6.9000e- 004	0.0553	1.0700e- 003	0.0563	0.0149	1.0100e- 003	0.0159	0.0000	64.8364	64.8364	1.8100e- 003	5.3000e- 003	66.4620

## 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					ton	s/yr							MT	/yr		
Off-Road	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3092	155.3092	0.0370	0.0000	156.2328
Total	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3092	155.3092	0.0370	0.0000	156.2328

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### Jersey Industrial Complex HDV - San Bernardino-South Coast County, Annual

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

## 3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e- 003	0.0816	0.0330	4.0000e- 004	0.0139	5.8000e- 004	0.0145	4.0200e- 003	5.6000e- 004	4.5800e- 003	0.0000	38.5340	38.5340	1.0000e- 003	5.6900e- 003	40.2561
Worker	0.0201	0.0150	0.1870	5.3000e- 004	0.0632	3.2000e- 004	0.0635	0.0168	2.9000e- 004	0.0171	0.0000	48.7323	48.7323	1.3000e- 003	1.3400e- 003	49.1636
Total	0.0226	0.0965	0.2200	9.3000e- 004	0.0771	9.0000e- 004	0.0780	0.0208	8.5000e- 004	0.0217	0.0000	87.2663	87.2663	2.3000e- 003	7.0300e- 003	89.4197

### **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					ton	s/yr							MT	/yr		
	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3090	155.3090	0.0370	0.0000	156.2326
Total	0.1054	0.9638	1.0884	1.8100e- 003		0.0469	0.0469		0.0441	0.0441	0.0000	155.3090	155.3090	0.0370	0.0000	156.2326

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### 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 Off-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e- 003	0.0816	0.0330	4.0000e- 004	0.0139	5.8000e- 004	0.0145	4.0200e- 003	5.6000e- 004	4.5800e- 003	0.0000	38.5340	38.5340	1.0000e- 003	5.6900e- 003	40.2561
Worker	0.0201	0.0150	0.1870	5.3000e- 004	0.0632	3.2000e- 004	0.0635	0.0168	2.9000e- 004	0.0171	0.0000	48.7323	48.7323	1.3000e- 003	1.3400e- 003	49.1636
Total	0.0226	0.0965	0.2200	9.3000e- 004	0.0771	9.0000e- 004	0.0780	0.0208	8.5000e- 004	0.0217	0.0000	87.2663	87.2663	2.3000e- 003	7.0300e- 003	89.4197

## 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					ton	s/yr							MT	/yr		
	8.2600e- 003	0.0791	0.1097	1.7000e- 004	_	3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565
Paving	1.3000e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5600e- 003	0.0791	0.1097	1.7000e- 004	-	3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565

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

3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358
Total	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	Γ/yr		
	8.2600e- 003	0.0791	0.1097	1.7000e- 004		3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565
	1.3000e- 003		i i		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.5600e- 003	0.0791	0.1097	1.7000e- 004		3.9200e- 003	3.9200e- 003		3.6200e- 003	3.6200e- 003	0.0000	14.7407	14.7407	4.6300e- 003	0.0000	14.8565

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

3.6 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 .	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358
Total	6.3000e- 004	4.7000e- 004	5.8400e- 003	2.0000e- 005	1.9700e- 003	1.0000e- 005	1.9800e- 003	5.2000e- 004	1.0000e- 005	5.3000e- 004	0.0000	1.5224	1.5224	4.0000e- 005	4.0000e- 005	1.5358

## 3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	⁻/yr		
Archit. Coating	0.7458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e- 003	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256
Total	0.7500	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256

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

## 3.7 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911
Total	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.7458					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2200e- 003	0.0287	0.0398	7.0000e- 005	 	1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256
Total	0.7500	0.0287	0.0398	7.0000e- 005		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003	0.0000	5.6172	5.6172	3.4000e- 004	0.0000	5.6256

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### 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 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					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911
Total	1.3000e- 003	9.7000e- 004	0.0121	3.0000e- 005	4.1000e- 003	2.0000e- 005	4.1200e- 003	1.0900e- 003	2.0000e- 005	1.1100e- 003	0.0000	3.1631	3.1631	8.0000e- 005	9.0000e- 005	3.1911

### 4.0 Operational Detail - Mobile

### **4.1 Mitigation Measures Mobile**

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

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0615	3.2087	0.7773	0.0175	0.6559	0.0330	0.6889	0.1853	0.0316	0.2169	0.0000	1,708.676 3	1,708.676 3	0.0555	0.2525	1,785.320 6
Unmitigated	0.0615	3.2087	0.7773	0.0175	0.6559	0.0330	0.6889	0.1853	0.0316	0.2169	0.0000	1,708.676 3	1,708.676 3	0.0555	0.2525	1,785.320 6

### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	102.13	102.13	102.13	1,487,030	1,487,030
Total	102.13	102.13	102.13	1,487,030	1,487,030

### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No		40.00	0.00	0.00	100.00	0.00	100	0	0

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.165800	0.208600	0.625600	0.000000	0.000000	0.000000	0.000000	0.000000

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

## 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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	68.3890	68.3890	5.7700e- 003	7.0000e- 004	68.7418
Electricity Unmitigated	,,		       			0.0000	0.0000	       	0.0000	0.0000	0.0000	68.3890	68.3890	5.7700e- 003	7.0000e- 004	68.7418
NaturalGas Mitigated	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003	       	1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
NaturalGas Unmitigated	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

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### 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**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	320756	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003	 	1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
Total		1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

### **Mitigated**

	NaturalGa s 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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	320756	1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185
Total		1.7300e- 003	0.0157	0.0132	9.0000e- 005		1.1900e- 003	1.1900e- 003		1.1900e- 003	1.1900e- 003	0.0000	17.1168	17.1168	3.3000e- 004	3.1000e- 004	17.2185

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

## 5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	15400	2.7311	2.3000e- 004	3.0000e- 005	2.7452
Unrefrigerated Warehouse-No Rail	370226	65.6579	5.5400e- 003	6.7000e- 004	65.9966
Total	·	68.3890	5.7700e- 003	7.0000e- 004	68.7418

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	√yr	
Parking Lot	15400	2.7311	2.3000e- 004	3.0000e- 005	2.7452
Unrefrigerated Warehouse-No Rail	370226	65.6579	5.5400e- 003	6.7000e- 004	65.9966
Total		68.3890	5.7700e- 003	7.0000e- 004	68.7418

### 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					ton	s/yr							MT	/yr		
Mitigated	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Unmitigated	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 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					ton	s/yr							MT	/yr		
Coating	0.0746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	0.5795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
" " " " "	3.2000e- 004	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Total	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003

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### 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	СО	SO2	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					ton	s/yr							MT	/yr		
Coating	0.0746					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.5795		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.2000e- 004	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003
Total	0.6544	3.0000e- 005	3.4400e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	6.6900e- 003	6.6900e- 003	2.0000e- 005	0.0000	7.1300e- 003

### 7.0 Water Detail

## 7.1 Mitigation Measures Water

Apply Water Conservation Strategy

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

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
Willigatou	77.5394	0.9677	0.0234	108.7097
Unmitigated	96.9243	1.2097	0.0293	135.8871

## 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	36.9029 / 0	96.9243	1.2097	0.0293	135.8871
Total		96.9243	1.2097	0.0293	135.8871

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

### 7.2 Water by Land Use

### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.5223 /	77.5394	0.9677	0.0234	108.7097
Total		77.5394	0.9677	0.0234	108.7097

### 8.0 Waste Detail

### **8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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

### Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
Miligatod	7.6127	0.4499	0.0000	18.8601
Unmitigated	30.4507	1.7996	0.0000	75.4403

## 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	150.01	30.4507	1.7996	0.0000	75.4403
Total		30.4507	1.7996	0.0000	75.4403

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

### 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	37.5025	7.6127	0.4499	0.0000	18.8601
Total		7.6127	0.4499	0.0000	18.8601

## 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
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#### **Boilers**

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

### **User Defined Equipment**

Equipment Type	Number

### 11.0 Vegetation

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