City of Rialto—Lilac Avenue and Santa Ana Avenue Warehouse Project Initial Study/Mitigated Negative Declaration
Appendix A:
Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report



FIRSTCARBON SOLUTIONS™

Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report Lilac Avenue and Santa Ana Avenue Warehouse Project City of Rialto, San Bernardino County, California

Prepared for:

Seefried Industrial Properties, Inc.

2321 Rosecrans Avenue, Suite 2220 El Segundo, CA 90245 310.536.7900

Contact: Dan Bick, Senior Vice President, West Region

Lead Agency: City of Rialto Planning Division 150 South Palm Avenue Rialto, CA 92376 909.820.2505

Contact: Daniel Casey, Senior Planner

Prepared by: FirstCarbon Solutions 250 Commerce, Suite 210 Irvine, CA 92602 888.826.5815

Contact: Angela Wolfe, Senior Project Manager

Contributing Authors: Noah Tanski, Senior Air Quality and Noise Scientist Kimber Johnson, Senior Air Quality Scientist

> Report Date: November 18, 2022 Updated May 4, 2023





Table of Contents

Section 1: Introduction	
1.2 - Summary of Analysis Results	3
Section 2: Regulatory Setting	11
2.1 - Federal	
2.2 - State	
Section 3: Methods	
3.1 - Approach to Analysis	
Section 4: Impact Analysis	55
4.1 - Air Quality Analysis	
4.2 - Greenhouse Gases Impact Analysis	
4.3 - Energy Impact Analysis	85
Appendix A: Supporting Calculations and Notes	
Appendix B: CalEEMod Modeling Results	
Appendix C: Health Risk Assessments	
List of Tables	
Table 1: Description of Air Pollutants	13
Table 2: Summary of Operational Emission Source Configurations	53
Table 3: SCAQMD Regional Thresholds of Significance	55
Table 4: SCAQMD Localized Significance Thresholds	56
Table 5: Unmitigated Emissions by Construction Activity (Max Emissions per Day)	61
Table 6: Unmitigated Operational Air Quality Emissions (Max Emissions per Day)	62
Table 7: Construction Localized Significance Screening Analysis	64
Table 8: Operational Localized Screening Significance Analysis	65
Table 9: Project DPM Construction Emissions—Unmitigated	68
Table 10: Estimated Health Risks and Hazards During Project Construction—Unmitigated	69
Table 11: Vehicle Trip Generation During Operations (Daily)	69
Table 12: Exposure Assumptions for Cancer Risk	70
Table 13: Summary of Health Risk Impacts from Project Operations (30-Year Exposure)	70
Table 14: Screening Levels for Potential Odor Sources	72
Table 15: Estimated Construction-Related Greenhouse Gas Emissions	76
Table 16: Estimated Operations-Related Greenhouse Gas Emissions	

Table 17: 2017 Scoping Plan Consistency	79
Table 18: Proposed Project Consistency with 2022 Scoping Plan Greenhouse Gas Emission Reduction Strategies	82
Table 19: Estimated Annual Project Energy Consumption	87
List of Exhibits	
Exhibit 1: Regional Location Map	5
Exhibit 2: Local Vicinity Map	7
Exhibit 3: Site Plan	9

SECTION 1: INTRODUCTION

This Air Quality, Greenhouse Gas Emissions and Energy Analysis Technical Report has been prepared by FirstCarbon Solutions (FCS) for the proposed Lilac Avenue and Santa Ana Avenue Warehouse Project (proposed project). The purpose of this report is to (1) summarize relevant local, State, and federal regulations; (2) analyze potential project-related impacts on air quality, greenhouse gas (GHG) emissions, and energy resources; and (3) recommend appropriate measures to mitigate potential impacts to less than significant levels.

1.1 - Project Summary

1.1.1 - Site Location

The project site is located in the City of Rialto (City), in San Bernardino County, California. The City is surrounded by San Bernardino to the north, Muscoy (a census-designated place in San Bernardino County) and the City of San Bernardino to the east, parts of the cities of Bloomington, Colton, Riverside, and Grand Terrace to the south, and Fontana to the west (Exhibit 1). Regional access to the site is provided via Interstate 10 (I-10) at the South Riverside Avenue exit. Local access to the site is provided via Lilac Avenue and Santa Ana Avenue (Exhibit 2).

The approximately 13.68-acre project site is located south of Santa Ana Avenue, west of South Lilac Avenue, east of Cactus Avenue, and corresponds to Assessor's Parcel Numbers (APNs) 0258-102-58-0000, -59, -60, -61, and -68. All five parcels are designated as Light Industrial according to the Rialto General Plan¹ and zoned as Light Industrial (M-1) according to the Rialto Zoning Map.²

1.1.2 - Project Description

The project applicant proposes to develop a dry storage warehouse with totaling approximately 301,000 square feet, including approximately 297,500 square feet of warehouse space and an approximately 3,500-square-foot office/mezzanine (Exhibit 3). The proposed project would contain 35 dock-high doors and 48 trailer stalls. Parking for the proposed project would consist of 180 automobile stalls. Access to the proposed project would be provided by two driveways along Santa Ana Avenue and one driveway along Lilac Avenue.

1.1.3 - Off-site Improvements

The proposed project would include approximately 1.5 acres of off-site improvements. Improvements include construction of two commercial driveways on Santa Ana Avenue, one commercial driveway on Lilac Avenue, and approximately 8,250 square feet of sidewalk and 7,300 square feet landscape improvements along the project frontages. One existing driveway along Lilac Avenue would be removed and curb and gutter would be replaced along the entire project frontage. Paving, curb, and gutter improvements would total approximately 49,790 square feet. On Santa Ana

FirstCarbon Solutions 1 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

City of Rialto. 2010. Rialto General Plan. Website: https://www.yourrialto.com/DocumentCenter/View/1494/2010-General-Plan. Accessed October 29, 2022.

City of Rialto. 2013. Rialto Zoning Map. Website: https://www.yourrialto.com/DocumentCenter/View/1513/Zoning-Map-July-2013. Accessed October 29, 2022.

Avenue, one 10-inch fire water service, one 3-inch domestic service, and one 2-inch irrigation service would be extended to the property line from the water main. On Lilac Avenue, one 10-inch fire service line would be constructed extending from the main to the project site and one 6-inch sewer lateral would be constructed extending from the main to the project site. Public fire hydrants would be provided on both project frontages to adhere to City of Rialto spacing requirements.³

The site is currently served by an existing water service, fire service, and irrigation service. These services would be removed and new improvements for service would be constructed to tie into the existing infrastructure, as described above. Above ground utilities within the public right-of-way would be undergrounded per the City of Rialto Municipal Code.⁴

1.1.4 - Site Access and Circulation

The proposed project would include 180 automobile stalls (including six Americans with Disabilities Act [ADA] stalls and 18 electric vehicle [EV] stalls) and 48 trailer stalls. Trailer stalls would be located north of the building along Lilac Avenue, and standard parking stalls would be located throughout the site to the west, north, and east of the building. Access to the site would be provided via one 40-foot-wide driveway and one 26-foot-wide driveway along Santa Ana Avenue and one 40-foot-wide driveway along Lilac Avenue. Regional access to the site is provided via I-10 at the South Riverside Avenue exit. Local access to the site is provided via Lilac Avenue, Santa Ana Avenue, and South Cactus Avenue

1.1.5 - Design and Appearance

The proposed warehouse building would be concrete tilt-up panel construction with metal roof deck over steel bar joist. Entrances would be covered with aluminum entry canopies. The building would be designed for a 36-foot interior height at the perimeter walls with the maximum overall height of approximately 40 feet at office corners and a 42-foot-high accent wall.

1.1.6 - Storm Drainage

The proposed project would install an on-site storm drain system consisting of ribbon gutters, catch basin inlets, and underground pipes. Runoff would be directed toward three underground infiltration basins located within the drive aisle around the site. Stormwater quality low-flows from the site are expected to be retained and infiltrated into the native soil while the excess overflow would be released toward Lilac Avenue and the southerly drainage channel. In terms of drainage and stormwater quality, the proposed project would be designed to conform to the requirements of the San Bernardino County Hydrology Manual, and Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) Order No. R8-2002-0012 (National Pollutant Discharge Elimination System [NPDES] Permit No. CAS618036) and relevant design would be documented in technical report formats (i.e., Water Quality Management Plan [WQMP] and Drainage Report).

2

³ City of Rialto requires one public fire hydrant per 300 linear feet of project frontage

City of Rialto. 2022. Title 15, Chapter 15.32, Underground Utilities. Website: https://library.municode.com/ca/rialto/codes/code_of_ordinances?nodeId=TIT15BUCO_CH15.32UNUT. Accessed November 16, 2022

1.1.7 - Wastewater

The project site would eventually be served by a public sanitary sewer located in Lilac Avenue; however, it is anticipated that sewer service would not be available until after the occupancy of the building. Therefore, the proposed project would include a temporary septic field at the southeast corner of the project site as an interim measure. This system would remain in use until the public sewer is available, at which point the system would be decommissioned.

1.1.8 - Phasing and Construction

The proposed project would demolish the three existing buildings and associated parking areas onsite. Construction of the proposed project and off-site roadway improvements is estimated to start summer 2023; grading of the site would take approximately 30 days. Demolition and construction would be completed in one phase that is estimated to begin in summer 2023 and conclude in summer 2024. The proposed project is expected to be operational in the fourth quarter of 2024.

1.1.9 - Operation and Employment

Hours of operation for the proposed project would be 24 hours a day, 7 days a week. Operational activities within the project site would comply with the permitted uses of the Light Industrial designation and Light Manufacturing zone, as described in the Rialto General Plan and Rialto Municipal Code. The proposed project would employ approximately 252 employees on-site.

1.2 - Summary of Analysis Results

The following is a summary of the analysis results. Please refer to Section 4.1, Air Quality Impact Analysis; Section 4.2, Greenhouse Gases Impact Analysis; and Section 4.3, Energy Impact Analysis, which provide the comprehensive analysis in support of the findings and conclusion of significance.

Air Quality

Impact AIR-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Less than significant impact.

Impact AIR-2: The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Less than significant impact.

Impact AIR-3: The proposed project could expose sensitive receptors to substantial pollutant concentrations. Less than significant impact.

Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Less than significant impact.

GHG

Impact GHG-1: The proposed project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; however, these impacts would not result in a significant impact on the environment with implementation of mitigation. Less than significant impact with mitigation incorporated.

Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases with the implementation of mitigation. **Less than significant impact with mitigation incorporated.**

Energy

Impact ENER-1: The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. **Less than significant impact.**

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. **Less than significant impact.**

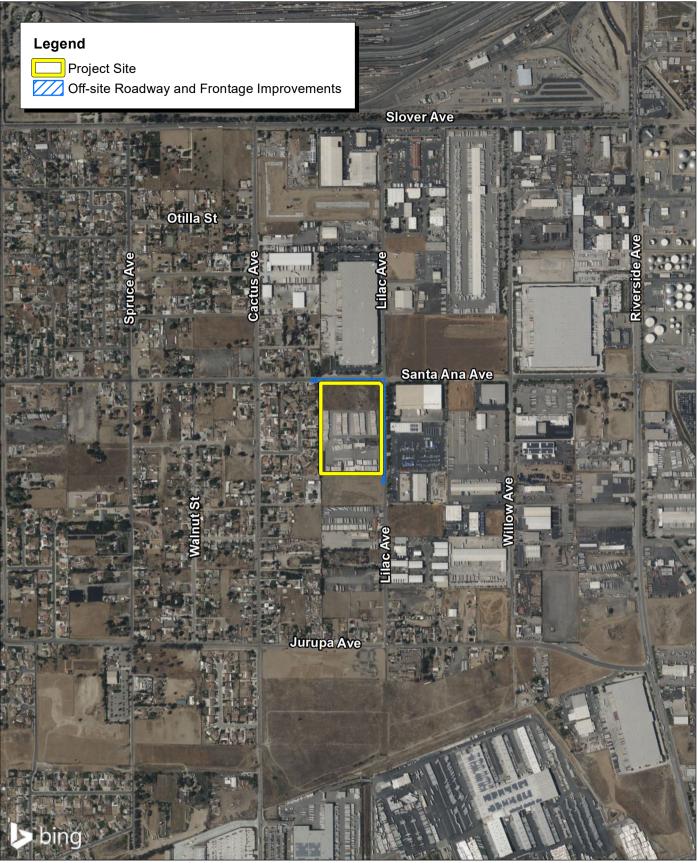


Source: Census 2000 Data, The California Information Library (CaSIL).



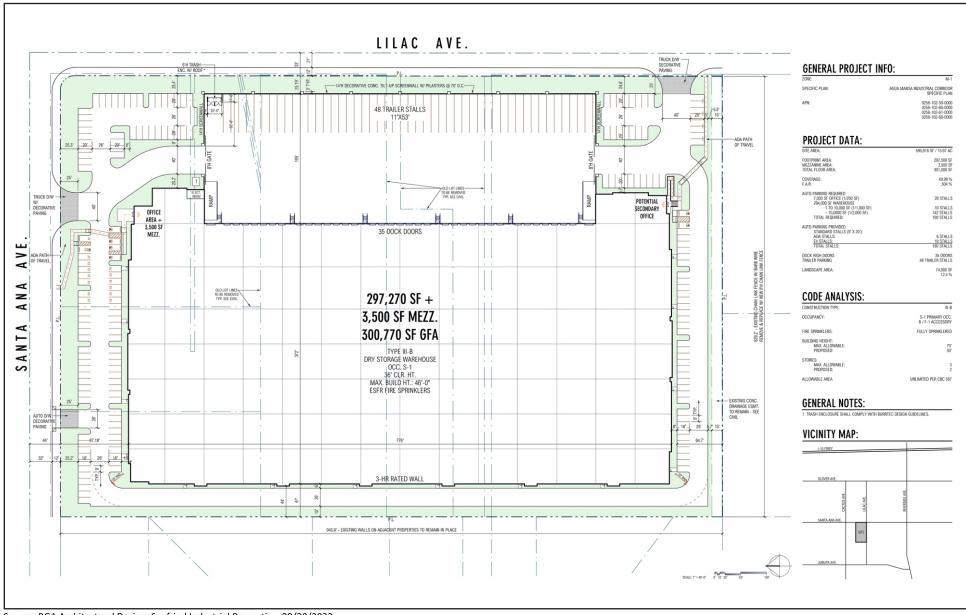
Exhibit 1 Regional Location Map





Source: Bing Aerial Imagery. Kimley-Horn 7/13/2022.





Source: RGA Architectural Design; Seefried Industrial Properties, 09/20/2022.



Exhibit 3
Site Plan



SECTION 2: REGULATORY SETTING

2.1 - Federal

2.1.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are particulate matter, ground level ozone, carbon monoxide (CO), sulfur oxides (SO_X), nitrogen oxides (NO_X), and lead. The United States Environmental Protection Agency (EPA) calls these pollutants criteria air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards. The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO₂)
- Lead

- Particulate matter (PM₁₀ and PM_{2.5})
- Carbon monoxide
- Sulfur dioxide (SO₂)

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal CAA Amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

2.1.2 - Toxic Air Contaminants

A Toxic Air Contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate Hazardous Air Pollutants (HAPs). Section 112 of the Clean Air Act lists 187 HAPs to be

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

⁵ United States Environmental Protection Agency (EPA). 2014. Clean Air Act Requirements and History. Website: https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history. Accessed October 10, 2022.

regulated by source category. Authority to regulate these pollutants was delegated to individual states. The California Air Resources Board (ARB) and local air districts regulate TACs and HAPs in California.

The California Almanac of Emissions and Air Quality-2013 edition presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. ⁶ The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

2.1.3 - Air Pollutant Description and Health Effects

The federal and State ambient air quality standards, relevant effects, properties, and sources of the air pollutants are summarized in Table 1.

California Air Resources Board (ARB). 2013. The California Almanac of Emissions and Air Quality—2013 Edition. Website: https://ww2.arb.ca.gov/our-work/programs/almanac-emissions-air-quality/about. Accessed November 17, 2022.

Table 1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	_	Irritate respiratory system; reduce	Ozone is a photochemical pollutant	Ozone is a secondary pollutant;
	8 Hours	0.070 ppm	0.070 ppm ^f	lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile organic compounds (VOCs), nitrogen oxides (NO _x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind. Hot, sunny, and calm weather conditions are favorable to ozone formation.	thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (on-road and offroad vehicle exhaust).
СО	1 Hour	20 ppm	35 ppm	Ranges depend on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas.	CO is produced by incomplete
	8 Hours	9.0 ppm	9 ppm		CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential woodburning, and natural sources.
NO ₂ ^b	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic	During combustion of fossil fuels,	NO _x is produced in motor vehicle
	Annual	0.030 ppm	0.053 ppm	respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	oxygen reacts with nitrogen to produce nitrogen oxides— NO_X (NO, NO_2 , NO_3 , N_2O , N_2O_3 , N_2O_4 , and N_2O_5). NO_X is a precursor to ozone, PM_{10} , and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO ₂ forms quickly from NO _X emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources	
SO ₂ ^c	1 Hour	0.25 ppm	0.075 ppm	by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO ₂ levels. It is not clear whether the two pollutants act synergistically, or one	by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or oblysical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. It is not clear whether the two collutants act synergistically, or one collutant alone is the predominant levels greater than 0.5 ppm, the gas has a strong odor like rotten eggs. Sulfur oxides (SO_X) include SO_2 and sulfur trioxide. Sulfuric acid is formed from SO_2 , which can lead to acid deposition and can harm natural resources and materials. Although SO_2 concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because SO_2 is a precursor to sulfate and PM_{10} .	can also be produced in the air by dimethyl sulfide and hydrogen sulfide. SO_2 is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The SO_2 levels in the State	
	3 Hours	_	0.5 ppm				
	24 Hours	0.04 ppm	0.14 (for certain areas)				
	Annual	_	0.030 ppm (for certain areas)				
Particulate	24 hours	50 μg/m³	$150 \mu g/m^3$	Short-term exposure	·	Suspended particulate matter is a	Stationary sources include fuel or
matter (PM ₁₀)	Mean	20 μg/m³	_	(hours/days): irritation of the eyes, nose, throat; coughing;	mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is	wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products	
Particulate	24 Hours	_	35 μg/m³	phlegm; chest tightness; shortness of breath; aggravate			
matter (PM _{2.5})	Annual	12 μg/m³	12 μg/m³	existing lung disease, causing asthma attacks and acute			
Visibility- reducing particles	8 Hours	See note	e below ^d	 bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death. 	between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hours	25 μg/m³	_	Decrease in ventilatory function; aggravation of asthmatic symptoms; aggravation of cardiopulmonary disease; vegetation damage; degradation of visibility; and property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-} . Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of SO ₂ . In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead ^e	30 days	1.5 μg/m ³	_	Lead accumulates in bones, soft	Lead is a solid heavy metal that can	Lead ore crushing, lead ore smelting,
	Quarter	_	1.5 μg/m ³	kidneys, liver, and nervous system. It can cause impairment of blood was us formation and nerve conduction, behavior disorders, mental retardation, neurological particle part	exist in air pollution as an aerosol particle component. Leaded gasoline	and battery manufacturing are currently the largest sources of lead
	Rolling 3- month average	_	0.15 μg/m ³		was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	in the atmosphere in the United States. Other sources include dust from soils contaminated with lead- based paint, solid waste disposal, and crustal physical weathering.
Vinyl chloride ^e	24 Hours	0.01 ppm	_	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	· ·	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	_	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application-sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
VOC		There are no State or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified TACs.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM ₁₀ and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, lightheadedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of PM _{2.5} —diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, several which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

	Averaging	California	Federal	Most Relevant Effects from Pollutant		
Air Pollutant	Time	Standard	Standard	Exposure	Properties	Sources

Notes:

ppm = parts per million (concentration) $\mu g/m^3 = micrograms$ per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

- ^a Federal standard refers to the primary NAAQS, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO₂, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- b To attain the 1-hour NO₂ 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 parts per billion (ppb) (0.100 ppm).
- ^c On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 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.
- Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.
- e The ARB has identified lead and vinyl chloride as TACs 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.
- The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015, and became effective on December 28, 2015.
- For the official level of the 1-hour NO₂ standard is 100 ppb, equal to 0.100 ppm, which is shown here for the purpose of clearer comparison to the other standards.

Source of effects, properties, and sources: United States Environmental Protection Agency (EPA). 2003. Particle Pollution and your Health. EPA-452/F-03-001. September. Website: https://www.airnow.gov/sites/default/files/2018-03/pm-color.pdf. Accessed November 17, 2022.

United States Environmental Protection Agency (EPA). 2009. Ozone and your Health EPA-456/F-09-001. Website: https://www.airnow.gov/sites/default/files/2020-02/ozone-c.pdf. Accessed November 17, 2022.

United States Environmental Protection Agency (EPA). 2009. Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide. July. Website: https://www.gpo.gov/fdsvs/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed November 17, 2022.

United States Environmental Protection Agency (EPA). 2010. Technology Transfer Network, Air Toxics Website. Page updated December 21, 2018. Health Effects Notebook for Hazardous Air Pollutants. December. Website: https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants. Accessed November 17, 2022.

National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. June 10. Benzene. Website: http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf. Accessed November 17, 2022.

National Toxicology Program. 2016. Report on Carcinogens, Fourteenth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf. Accessed November 17, 2022.

California Environmental Protection Agency (Cal/EPA). 2002. Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. Website:

https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf. Accessed November 17, 2022.

California Air Resources Board (ARB). 2009. Vinyl Chloride. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed November 17, 2022.

United States Environmental Protection Agency (EPA). 2017. Indoor Air Quality. Sources of Indoor Air Pollution—Organic Gases (Volatile Organic Compounds—VOCs). November. Website: www.epa.gov/iaq/voc.html. Accessed November 17, 2022.

National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Website: https://oehha.ca.gov/media/downloads/proposition-65/crnr/comments/12throc-complete.pdf. Accessed November 17, 2022.

Source of standards: South Coast Air Quality Management District (SCAQMD). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS)

Attainment Status for South Coast Air Basin. February. Website http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=2.

Accessed November 17, 2022.



Several pollutants listed in Table 1 are not addressed in this analysis. An analysis of lead is not included in this report because the proposed project would not generate a new source of lead emissions. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed under the analysis for PM_{10} and $PM_{2.5}$. No components of the proposed project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity; therefore, these compounds are not further evaluated in this report.

2.1.4 - Toxic Air Contaminants Health Effects

The 2013 Edition of the California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Several studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

2.1.5 - Asbestos

Asbestos is the name given to several naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. No naturally occurring asbestos is located near the project site.⁹

California Air Resources Board (ARB). 2013. The California Almanac of Emissions and Air Quality—2013 Edition. Website: https://ww2.arb.ca.gov/our-work/programs/almanac-emissions-air-quality/about. Accessed November 17, 2022.

⁸ California Air Resources Board (ARB). 1998. The Report on Diesel Exhaust Website: https://ww2.arb.ca.gov/sites/default/files/classic//toxics/dieseltac/de-fnds.htm. Accessed November 17, 2022.

Galifornia Department of Conservation, Division of Mine Reclamation. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/asbestos/ofr_2000-019.pdf. Accessed November 17, 2022.

2.1.6 - EPA Emission Standards for New Off-road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment. In 1994, the EPA established emission standards for hydrocarbons, NO_X, CO, and particulate matter (PM) to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by the EPA, as well as by the ARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

2.1.7 - Massachusetts et al. v. EPA (United States Supreme Court GHG Endangerment Ruling)

Massachusetts et al. v. EPA (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four GHGs, including carbon dioxide (CO₂), under Section 202(a)(1) of the CAA. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the CAA. The Court held that the 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:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbon (HFC), perfluorocarbon (PFC), and sulfur hexafluoride (SF₆)—in the atmosphere threaten the public health and welfare of current and future generations; and
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these
 well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines
 contribute to the greenhouse gas pollution, which threatens public health and welfare.

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 under "Clean Vehicles" below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator findings.

2.1.8 - United States Consolidated Appropriations Act (Mandatory GHG Reporting)

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons (MT) or more per year of GHG emissions are required to submit annual

reports to the EPA. The first annual reports for the largest emitting facilities, covering calendar year 2010, were submitted to EPA in 2011.

2.1.9 - United States Clean Air Act Permitting Programs (New GHG Source Review)

The EPA issued a final rule on May 13, 2010, which establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Code of Federal Regulations, the EPA states:

This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phasein. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

2.1.10 - Energy Independence and Security Act

The Energy Policy Act of 2005 created the Renewable Fuel Standard program. The Energy Independence and Security Act of 2007 expanded this program by: 10

- Expanding the Renewable Fuel Standard program to include diesel in addition to gasoline;
- Increasing the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022;
- Establishing new categories of renewable fuel, and setting separate volume requirements for each one; and
- Requiring the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

FirstCarbon Solutions 21 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

¹⁰ United States Environment Protection Agency (EPA). Summary of the Energy Independence and Security Act. Website: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. Accessed October 10, 2022.

This expanded Renewable Fuel Standard program lays the foundation for achieving substantial reductions of GHG emissions from the use of renewable fuels, reducing the use of imported petroleum, and encouraging the development and expansion of the nation's renewable fuels sector.

Signed on December 19, 2007 by former President George W. Bush, the Energy Independence and Security Act of 2007 aims to:

- Move the United States toward greater energy independence and security;
- Increase the production of clean renewable fuels;
- Protect consumers;
- Increase the efficiency of products, buildings, and vehicles;
- Promote research on and deploy greenhouse gas capture and storage options;
- Improve the energy performance of the federal government; and
- Increase United States energy security, develop renewable fuel production, and improve vehicle fuel economy.

The Energy Independence and Security Act reinforces the energy reduction goals for federal agencies put forth in Executive Order 13423, as well as introduces more aggressive requirements. The three key provisions enacted are the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards.

The EPA is committed to developing, implementing, and revising both regulations and voluntary programs under the following subtitles in the Act, among others:

- Increased Corporate Average Fuel Economy Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration

2.1.11 - EPA and National Highway Traffic Safety Administration Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards Final Rule

Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light-duty trucks. The law has become more stringent over time. On May 19, 2009, former President George W. Bush put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the United States 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 United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO₂ per mile,

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric ton (MMT) and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

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. ¹¹ The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleet-wide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 miles per gallon if achieved exclusively through fuel economy improvements.

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 medium-duty passenger vehicles. The final standards are projected to result in an average industry fleet-wide level of 163 grams/mile of CO₂ in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

On August 2, 2018, the EPA and United States Department of Transportation proposed the Safer Affordable Fuel-Efficient Vehicles rule (SAFE rule), which was finalized March 31, 2020. The rule reduced the federal fuel efficiency and carbon dioxide standards issued in 2012 by requiring a 1.5 percent annual improvement rather than the 5 percent annual improvement required beginning in 2012. The rule also removed California's waiver from the EPA that allowed the State to set its own efficiency standards. Publication of this portion of the rule prompted a lawsuit from California in concert with 23 other states which is currently being litigated.

The EPA and NHTSA issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO₂ emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO₂ emissions from the 2014 to 2018 model years.

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

-

United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF. Accessed October 10, 2022.

2.2 - State

2.2.1 - California Air Quality Control Plan (State Implementation Plan)

An SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air quality standards. The ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention, administers the SIP for the State of California. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms for attaining and maintaining air quality standards.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards.

2.2.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The ARB administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are more stringent than the federal CAA; therefore, consistency with the CAA will also demonstrate consistency with the CCAA.

Other ARB responsibilities include, but are not limited to, overseeing local air district compliance with California and federal laws; approving local air quality plans; submitting SIPs to the EPA; monitoring air quality; determining and updating area designations and maps; conducting basic research aimed at providing a better understanding between emissions and public well-being, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

2.2.3 - California Health and Safety Code Section 39655 and California Code of Regulations Title 17 Section 93000 (Substances Identified as Toxic Air Contaminants)

The ARB identifies substances as TACs as defined in Health and Safety Code Section 39655 and listed in Title 17, Section 93000 of the California Code of Regulations, "Substances Identified as Toxic Air

Contaminants." A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. In general, for those TACs that may cause cancer, there are thresholds set by regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM) from diesel-fueled engines.

2.2.4 - California Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012, the ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for criteria pollutants and GHG emissions for new passenger vehicles. 12

2.2.5 - California Air Resources Board Advanced Clean Trucks Regulation

This regulation, which became effective in March 2021, requires manufacturers to sell zeroemissions trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales are required to be 55 percent of Class 2b-3 truck sales, 75 percent of Class 4-8 straight truck sales, and 40 percent of truck tractor sales. Under this regulation, the ARB estimates zero-emissions trucks to comprise 50 percent of "high priority fleets" (i.e., fleets of more than 50 vehicles owned by the same entity or fleets owned by entities with more than \$50 million annual revenue) by 2050.

2.2.6 - On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program, among others. 13

FirstCarbon Solutions 25 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

¹² California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: https://www.gsweventcenter.com/GSW RTC References/2015 0915 CleanAirStandards Pavley.pdf. Accessed October 12, 2022.

¹³ California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed October 12, 2022.

2.2.7 - California Air Resources Board Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to \$10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less). As of this date, these standards are now effectively in place for all fleet sizes.

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and privately and publicly owned school buses with a gross vehicle weight of greater than 14,000 pounds. The regulation provides various flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.¹⁴

2.2.8 - California Air Resources Board Airborne Toxic Control Measures for Asbestos

The ARB has adopted Airborne Toxic Control Measures (ATCM) for sources that emit a particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technology to minimize emissions.

In July 2001, the ARB approved an ATCM for construction, grading, quarrying and surface mining operations to minimize emissions of naturally occurring asbestos (NOA). The regulation requires applying Best Management Practices (BMPs) to control fugitive dust in areas known to have NOA and requires notification to the local air district before ground-disturbing activities. The measure establishes specific testing, notification, and engineering controls before grading, quarrying, or surface mining in construction zones where NOA is located on projects of any size. There are additional notification and engineering controls at work sites larger than one acre in size. Areas are subject to the regulation if they are identified on maps published by the Department of

California Air Resources Board (ARB). 2019. Truck and Bus Regulation Compliance Requirement Overview. Website: https://www.arb.ca.gov/msprog/onrdiesel/documents/fsregsum.pdf?_ga=2.142933558.283842078.1633537475-611272733.1590599157. Accessed October 3, 2022.

Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or NOA on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity.

2.2.9 - Verified Diesel Emission Control Strategies

The EPA and the ARB tiered off-road emission standards only apply to new engines and off-road equipment can last several years. The ARB has developed Verified Diesel Emission Control Strategies (VDECS), which are devices, systems, or strategies used to achieve the highest level of pollution control from existing off-road vehicles, to help reduce emissions from existing engines. VDECS are designed primarily for the reduction of DPM emissions and have been verified by the ARB. There are three levels of VDECS, the most effective of which is the Level 3 VDECS. Tier 4 engines are not required to install VDECS because they already meet the emissions standards for lower tiered equipment with installed controls.

2.2.10 - Diesel Risk Reduction Plan

The ARB Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions in 2020 by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010 and 85 percent by 2020. 15

2.2.11 - Tanner Air Toxics Act and Air Toxics Hotspots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the Hot Spots Act. To date, the ARB has identified more than 21 TACs, and has adopted the EPA's list of HAPs as TACs.

2.2.12 - Carl Moyer Memorial Air Quality Standards Attainment Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program), a partnership between the ARB and local air districts, issues grants to replace or retrofit older engines and equipment with engines and equipment that exceed current regulatory requirements to reduce air pollution. Money collected through the Carl Moyer Program complements California's regulatory program by providing incentives to effect early or extra emission reductions, especially from emission sources in environmental justice communities and areas disproportionately affected by air pollution. The program has established guidelines and criteria for the funding of emissions reduction projects. The program establishes cost-effectiveness criteria for funding emission reductions projects, which

FirstCarbon Solutions 27 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

¹⁵ California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf. Accessed October 3, 2022.

under the final 2017 Carl Moyer Program Guidelines are \$30,000 per weighted ton of NO_x, reactive organic gas (ROG), and PM. ¹⁶

2.2.13 - California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.¹⁷

The standards are to be phased in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in an approximately 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the LEV Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car Program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. 18

2.2.14 - California Senate Bill 1078: Renewable Electricity Standards

On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31,

-

California Air Resources Board (ARB). 2017. The Carl Moyer Program Guidelines. Website: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/moyer/guidelines/2017/2017 cmpgl.pdf. Accessed October 3, 2022.

California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed November 17, 2022.

California Air Resources Board (ARB). 2022. Final 2013 Scoping Plan Update and Appendices. Website: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2013-scoping-plan-documents. Accessed November 17, 2022.

2010, requiring the State's LSEs to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

2.2.15 - California Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable sources. Specifically, SB 100 accelerates the goals expressed under SB 1078 and requires that the program achieve 50 percent of electricity sourced from renewables by December 31, 2026, 60 percent by December 31, 2030, and 100 percent of electricity sourced from carbon-free sources by December 31, 2045. For clarification, renewable sources, as described herein, includes all renewable sources (e.g., solar, small hydro, wind) but notably omits large-scale hydroelectric and nuclear electricity generation; carbon-free sources include all renewable sources as well as large-scale hydroelectric and nuclear electricity generation.

2.2.16 - California Executive Order S-3-05 (GHG Emissions Reduction Targets)

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an Executive Order, the goals are not legally enforceable for local governments or the private sector.

2.2.17 - California Executive Order B-55-18 (GHG Emissions Reduction Targets)

On September 10, 2018, former California Governor Jerry Brown issued Executive Order B-55-18, which established the following GHG emissions reduction target:

By 2045, California shall achieve carbon net neutrality.

Executive Order B-55-18 identifies that new Statewide goal is to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net neutrality emissions thereafter. This emissions goal is in addition to the existing targets established by Executive Orders S-3-05 and B-30-15 and SB 32, as described in greater detail below. This Executive Order also directs the ARB to work with other State agencies to identify and recommend measures to achieve this goal.

The goal to achieve carbon net neutrality was codified in September 2022 by the signing of AB 1279 by Governor Gavin Newsom.

2.2.18 - California Assembly Bill 32: Global Warming Solutions Act and Scoping Plan

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020.

"Greenhouse gases" as defined under AB 32 include CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The ARB is the State agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the State from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB approved the 1990 GHG emissions level of 427 MMT carbon dioxide equivalent (CO₂e) on December 6, 2007. ¹⁹ Therefore, to meet the State's target, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO₂e. Emissions in 2020 in a business-as-usual (BAU) scenario were estimated to be 596 MMT CO₂e, which do not account for reductions from AB 32 regulations. ²⁰ At that rate, a 28 percent reduction was required to achieve the 427 MMT CO₂e 1990 inventory. In October 2010, the ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. The 2020 inventory without the benefits of adopted regulation is now estimated at 545 MMT CO₂e. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels. ²¹

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by ARB for 2000 through 2012 to show progress achieved to date. ²² The State has also achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target. Also shown are the average reductions needed from all Statewide sources (including all existing sources) to reduce GHG emissions back to 1990 levels.

- **1990**: 427 MMT CO₂e (AB 32 2020 Target)
- 2000: 463 MMT CO₂e (an average 8 percent reduction needed to achieve 1990 base)
- 2010: 450 MMT CO₂e (an average 5 percent reduction needed to achieve 1990 base)
- 2020: 545 MMT CO₂e BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base)

10

California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed November 17, 2022.

²⁰ California Air Resources Board (ARB). 2008. Climate Change Scoping Plan, a framework for change. December

²¹ California Air Resources Board (ARB). 2021. GHG 2020 Business-as-Usual Emissions Projection. Website: https://ww2.arb.ca.gov/ghg-bau. Accessed November 17, 2022.

²² California Air Resources Board (ARB). 2014. California Greenhouse Gas Emissions for 2000 to 2012—Trends of Emissions and Other Indicators.

The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.²³ The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewables energy mix of 33 percent;
- Developing a California Cap-and-Trade Program that links with other Western Climate Initiative partner programs to create a regional market system;
- 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 (LCFS); and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential (GWP) gases, and a fee to fund the administrative costs of the State's longterm commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed Cap-and-Trade Program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.²⁴

ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities Climate for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long-term 2050 goal of Executive Order S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050.

FirstCarbon Solutions

At https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

²³ California Air Resources Board (ARB). 2008. Change Scoping Plan, a framework for change. December.

²⁴ California Air Resources Board (ARB). 2008. Change Scoping Plan, a framework for change. December.

AB 32 does not give the ARB a legislative mandate to set a target beyond the 2020 target or to adopt additional regulations to achieve a post-2020 target. The Update estimates that reductions averaging 5.2 percent per year would be required after 2020 to achieve the 2050 goal. With no estimate of future reduction commitments from the State, identifying a feasible strategy including plans and measures to be adopted by local agencies is not currently possible.²⁵

The Cap-and-Trade Program is a key element of the Scoping Plan. It sets a Statewide limit on sources responsible for 85 percent of California's GHG emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest cost options to reduce emissions. The program conducted its first auction in November 2012. Compliance obligations began for power plants and large industrial sources in January 2013. Other significant milestones include linkage to Québec's cap-and-trade system in January 2014 and starting the compliance obligation for distributors of transportation fuels, natural gas, and other fuels in January 2015. ²⁶

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 Statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by the ARB in the First Update:

The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.²⁷

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

-

²⁵ California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed November 17, 2022.

²⁶ California Air Resources Board (ARB). 2015. ARB Emissions Trading Program. Website: https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/about. Accessed November 17, 2022.

²⁷ California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed November 17, 2022.

The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the "capped sectors." Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California's 2020 limit will be met because the regulation sets a firm limit on 85 percent of California's GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by ARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.²⁸

2.2.19 - California Senate Bill 375: Sustainable Communities and Climate Protection Act

SB 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning California Environmental Quality Act (CEQA), SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

- 1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets;
- 2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies); and
- 3. Incorporates the mitigation measures required by an applicable prior environmental document.

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

²⁸ California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed November 17, 2022.

2.2.20 - California Senate Bill 1368: Emission Performance Standards

In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, of 1,100 lb. CO₂ per megawatt-hour (MWh).

2.2.21 - California Executive Order S-01-07: Low Carbon Fuel Standard

The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established an LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "lifecycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by the CEC on December 24, 2007) and was submitted to the ARB for consideration as an "early action" item under AB 32. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that ARB failed to comply with CEQA Guidelines and the Administrative Procedure Act when adopting regulations for Low Carbon Fuel Standards. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two executive orders of ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015, and September 25, 2015, where the LCFS regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with

the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015.²⁹

2.2.22 - California Executive Order N-79-20

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent Zero-Emission Vehicles (ZEVs) by 2035, where feasible. While in-state sales of EVs will increase through 2045, the State does not currently have legislation which will restrict or preclude the use of fossil-fueled vehicles by or after 2045. The ARB is tasked with achieving these goals and is in the process of exploring various regulatory concepts for its attainment.

2.2.23 - California Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy was adopted, which is the "... first Statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

2.2.24 - California Senate Bill X 7-7: Water Conservation Act

This 2009 legislation directs urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this Statewide goal of 20 percent decrease in demand will result in a reduction of almost 2 million acrefeet in urban water use in 2020.

2.2.25 - California Senate Bill 350: Clean Energy and Pollution Reduction Act

In 2015, the State Legislature approved, and the Governor signed SB 350, which reaffirmed California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the Renewables Portfolio Standard (RPS), higher energy efficiency requirements for buildings, initial strategies toward a regional electricity grid, and improved infrastructure for EV charging stations. Provisions for a 50 percent reduction in the use of petroleum Statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

FirstCarbon Solutions 35 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

²⁹ California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed November 17, 2022.

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission, the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electrified transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.³⁰

2.2.26 - California Executive Order B-30-15

On April 29, 2015, the Governor issued an Executive Order to establish a California GHG emissions reduction target of 40 percent below 1990 levels by 2030. The Governor's Executive Order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO₂e. The Executive Order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Executive Order is not legally enforceable against local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

2.2.27 - California Air Resources Board Truck and Bus Regulation

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet PM filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.31

2.2.28 - California Senate Bill 32

The Governor signed SB 32 in September of 2016, giving ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB

³⁰ California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill id=201520160SB350. Accessed November 17, 2022.

³¹ California Air Resources Board (ARB). 2015. On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed November 17, 2022.

32 states, "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350

- Achieve 50 percent Renewables Portfolio Standard by 2030.
- Doubling of energy efficiency savings by 2030.
- 2. Low Carbon Fuel Standard
 - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
- 3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
 - Maintaining existing GHG standards for light- and heavy-duty vehicles.
 - Put 4.2 million ZEVs on the roads.
 - Increase ZEV buses, delivery and other trucks.
- 4. Sustainable Freight Action Plan
 - Improve freight system efficiency.
 - Maximize use of near ZEV and equipment powered by renewable energy.
 - Deploy over 100,000 zero-emission trucks and equipment by 2030.
- Short-Lived Climate Pollutant Reduction Strategy
 - Reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030.
 - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
- 6. SB 375 Sustainable Communities Strategies
 - Increased stringency of 2035 targets.
- 7. Post-2020 Cap-and-Trade Program
 - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
 - The ARB will look for opportunities to strengthen the program to support more air quality
 co-benefits, including specific program design elements. In Fall 2016, the ARB staff
 described potential future amendments including reducing the offset usage limit,
 redesigning the allocation strategy to reduce free allocation to support increased
 technology and energy investment at covered entities and reducing allocation if the
 covered entity increases criteria or toxics emissions over some baseline.
- 8. 20 percent reduction in GHG emissions from the refinery sector.
- 9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

2.2.29 - 2022 Scoping Plan

The 2022 Scoping Plan establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan addresses the latest climate-related legislation and direction from current Governor Gavin Newsom, who, by his signing of AB 1279, required the State to reduce Statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels by 2045 and to maintain net negative GHG emissions thereafter. The 2022 Scoping Plan relies on the aggressive reduction of fossil fuels in all Statewide sectors and accelerating existing carbon reduction programs. Aspects of the 2022 Scoping Plan's scenario include:

- Rapidly moving to zero-emission transportation by electrifying cars, buses, trains, and trucks.
- Phasing out the use of fossil gas used for heating homes and buildings.
- Clamping down on chemicals, refrigerants, and other high GWP gases.
- Providing communities with sustainable options for walking, biking, and public transit to reduce reliance on cars.
- Continuing to develop solar arrays, wind turbine capacity, and other resources that provide clean, renewable energy.
- Scale up options such as renewable hydrogen and biomethane for end uses that are hard to electrify.

The ARB estimates that successfully achieving the outcomes called for by the 2022 Scoping Plan will reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent in 2045, relative to 2022. The 2022 Scoping Plan also emphasizes the role of natural and working lands and carbon capturing technologies to address residual emissions and achieve net negative emissions.

2.2.30 - California Assembly Bill 1279

Signed in September 2022 by Governor Gavin Newsom, AB 1279 directs the State to achieve net-zero GHG emissions as soon as possible, but no later than 2045. By 2045, AB 1279 requires the State to reduce Statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels and to maintain net negative GHG emissions thereafter. The bill tasks the ARB with monitoring and regulating GHG emissions to achieve this goal.

2.2.31 - California Code of Regulations Title 20: Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for

sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.³²

2.2.32 - California Code of Regulations Title 24: Energy Efficiency Standards

California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, 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. Energy-efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020.

2.2.33 - California Code of Regulations Title 24: Green Building Standards Code

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Standards Code (CALGreen) that became effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction ordinances and defers to them as the ruling guidance, provided that they provide a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen (California Code of Regulations [CCR] Title 24, Part 11) requires:

- Short-term bicycle parking. If a commercial project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of tenant-occupied motorized vehicle parking capacity, with a minimum of one space (5.106.4.1.2).
- **Designated parking**. Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- **Recycling by Occupants**. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling (5.410.1).

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

_

³² California Building Standards Commission. 2019. Title 24 Building Energy Efficiency Standards.

- Construction waste. A minimum 65 percent diversion of construction and demolition waste from landfills. (5.408.1, A5.408.3.1 [nonresidential], A5.408.3.1 [residential]). All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled (5.408.3).
- Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods:
 - 1. The installation of water-conserving fixtures or
 - 2. Using nonpotable water systems (5.303.4).
- Water use savings. 20 percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40 percent reductions (5.303.2, A5303.2.3 [nonresidential]).
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particleboard (5.404).
- Building commissioning. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

2.2.34 - California Model Water Efficient Landscaping Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The Ordinance required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are required. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems
- Incentives for graywater usage
- Improvements in on-site stormwater capture
- Limiting the portion of landscapes that can be planted with high water use plants
- Reporting requirements for local agencies.

2.2.35 - California Senate Bill 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG

emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

The 2010 CEQA Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the CEQA Guidelines, which focuses on energy conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

The most recent 2018 CEQA Amendments expanded upon the previous guidance by specifying that:

- The lead agency should focus its analysis on the reasonably foreseeable incremental
 contribution of the project's emissions to the effects of climate change. A project's
 incremental contribution may be cumulatively considerable even if it appears relatively small
 compared to Statewide, national, or global emissions. The agency's analysis should consider a
 timeframe that is appropriate for the project. The agency's analysis also must reasonably
 reflect evolving scientific knowledge and State regulatory schemes.
- In determining the significance of impacts, the lead agency may consider a project's
 consistency with the State's long-term climate goals or strategies, provided that substantial
 evidence supports the agency's analysis of how those goals or strategies address the project's
 incremental contribution to climate change and its conclusion that the project's incremental
 contribution is not cumulatively considerable.

A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use.

The 2010 changes to CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively, remained unchanged by the 2018 CEQA Amendment. GHG mitigation measures are referenced in general terms, but no specific measures are championed. The cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an Environmental Impact Report (EIR) when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 continues to permit programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

CEQA Guidelines emphasize that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA requirements for cumulative impacts analysis (see CEQA Guidelines § 15130(f)).

2.2.36 - Center for Biological Diversity v. California Department of Fish and Wildlife (California Supreme Court GHG Ruling)

In a November 30, 2015 ruling, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25–27 of the ruling to address this issue, as summarized below:

Specifically, the Court advised that:

- Substantiation of Project Reductions from BAU. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals. The Court suggested a lead agency could examine the "data behind the Scoping Plan's business-as-usual model" to determine the necessary project-level reductions from new land use development at the proposed location (p. 25).
- Compliance with Regulatory Programs or Performance Based Standards. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities. (See Final Statement of Reasons, supra, at p. 64 [greenhouse gas emissions 'may be best analyzed and mitigated at a programmatic level.'].)" To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Resources Board or other State agencies, a lead agency could appropriately rely on their use as showing compliance with 'performance based standards' adopted to fulfill 'a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions' (CEQA Guidelines § 15064.4(a)(2), (b)(3); see also id., § 15064(h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including 'plans or regulations for the reduction of greenhouse gas emissions']) (p. 26).
- Compliance with GHG Reduction Plans or Climate Action Plans (CAPs). A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or greenhouse gas emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (p. 26).
- Compliance with Local Air District Thresholds. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (p. 27).

Therefore, consistent with CEQA Guidelines Appendix G, the three factors identified in CEQA Guidelines Section 15064.4 and the recently issued Newhall Ranch opinion, the GHG impacts would be considered significant if the project would:

- Conflict with a compliant GHG Reduction Plan if adopted by the lead agency;
- Exceed the applicable GHG Reduction Threshold; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs.

2.2.37 - California Public Utilities Code

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers receive safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

2.3 - Regional and Local

2.3.1 - South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the region. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), San Bernardino Associated Governments (SANBAG), and local governments and cooperates actively with all federal and State agencies. The SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMP). The *Final 2016 Air Quality Management Plan* (2016 AQMP) was adopted by the SCAQMD Board in March 2017 and demonstrates how the SCAQMD would meet the NAAQS for annual PM_{2.5}, 24-hour PM_{2.5}, 1-hour ozone, and 8-hour ozone by 2024. SCAQMD is currently in the process of updating the AQMP to address the recently strengthened primary and secondary NAAQS for ozone, which were lowered to 70 ppb by EPA in 2015. At the time of this writing, the updated 2022 AQMP has not yet been adopted.

During construction and operation, the proposed project must comply with applicable rules and regulations. The following includes, but is not limited to, the rules that are applicable to this project:

Rule 402

Rule 402 prohibits a person from discharging 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.

Rule 403

Rule 403 governs emissions of fugitive dust. Compliance with this rule is achieved through application of standard Best Management Practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. Rule 403 also requires projects that disturb over 100 acres of soil or moves 10,000 cubic yards per day of materials to submit to SCAQMD a Fugitive Dust Plan.

Rule 431.1 is to reduce sulfur oxides (SO_X) emissions from the burning of gaseous fuels in stationary equipment requiring a permit to operate by the SCAQMD.

Rule 431.2

Rule 431.2 is to limit the sulfur content in diesel and other liquid fuels for the purpose of both reducing the formation of sulfur oxides and particulates during combustion and to enable the use of add-on control devices for diesel-fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low sulfur diesel, and other liquid fuels for stationary source applications in the District. The rule also affects diesel fuel supplied for mobile source applications.

Rule 481

Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

Rule 1108

Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the proposed project must comply with SCAQMD Rule 1108.

Rule 1303

Rule 1303 governs the permitting of re-located or new major emission sources, requiring best available control technology and setting significance limits for PM_{10} among other pollutants.

Rule 1113

Rule 1113 governs the sale, use and manufacturing of architectural coatings and limits the ROG content in paints and paint solvents. This rule applies to the project, and dictates the ROG content of paints available for the use during the construction of buildings. The project will comply with this rule.

Rule 1143

Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

Rule 1186

Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, State, county, agency or special district such as water, air, sanitation, transit, or school district.

Rule 1403

Rule 1403 specifies the work practice requirements to limit asbestos emissions and exposure from building demolition and renovation activities. Requirements include asbestos surveying; notification; asbestos-containing material (ACM) removal procedures and time schedules; ACM handling and cleanup procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste material (ACWM).

Rule 2305

Rule 2305 is an indirect source rule that regulates warehouse facilities with at least 100,000 square feet of indoor floor space in a single building. The rule requires the implementation of emission reduction measures, or the payment of an annual mitigation fee, as well as requiring reporting on facility operations. The intent of the rule is to reduce emissions from the goods movement industry.

Additionally, SCAQMD Regulation XXVII, Climate Change, applies to the proposed project and currently includes three rules:

Rule 2700 The purpose of Rule 2700 is to define terms and post global warming potentials.

Rule 2701

The purpose of Rule 2701, Southern California Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.

Rule 2702

The Greenhouse Gas Reduction Program was adopted on February 6, 2009. The purpose of this rule is to create a GHG Reduction Program for GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

SCAQMD CEQA Guidance

The SCAQMD has two roles under CEQA:

- 1. **Lead Agency:** responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SCAQMD where the SCAQMD has primary approval authority over the project.
- 2. **Commenting Agency:** the SCAQMD reviews and comments on air quality analyses prepared by other public agencies (such as the proposed project).

The SCAQMD also provides guidance and thresholds for CEQA air quality and GHG analyses.

2.3.2 - SCAG Regional Transportation Plan/Sustainable Communities Strategy

The SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Connect SoCal, was adopted on September 3, 2020. The RTP/SCS identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, high-speed rail, active transportation strategies (such as bike paths and pedestrian connections), transportation demand management strategies, transportation systems management, highway improvements (interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes), arterial improvements, goods movement strategies, aviation and airport ground access improvements, and operations and maintenance to the existing multimodal transportation system.

Connect SoCal identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overall GHG emission reduction strategy included in the 2020-2045 RTP/SCS is to allow the region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands. The projected regional development pattern in Connect SoCal would reduce per capita GHG emissions originating from Vehicle Miles Traveled (VMT) and support the achievement the GHG emission reduction targets for the SCAG region, as established by the ARB.

2.3.3 - Rialto General Plan

The Rialto General Plan was adopted in December 2010.³³ The General Plan contains guidance on a range of topics such as land use, community design, conservation, goods movement, noise, hazardous materials, etc. The following air quality, GHG, and energy-related goals and policies have relevance to the proposed project:

- **Goal 2-9** Protect residential, schools, parks, and other sensitive land uses form the impacts associated with industrial and trucking-related land uses, as well as commercial and retail areas.
- Policy 2-9.1 Require mitigation and utilize other techniques to protect residential development and other sensitive land uses near industrial land uses or within identified health risk areas from excessive noise, hazardous materials and waste releases, toxic air pollutant concentrations, and other impacts.
- Goal 2-29 Conserve water resources.
- **Policy 2-29.1** Require new development to use features, equipment, technology, landscaping, and other methods to reduce water consumption.

³³ City of Rialto. 2010. Rialto General Plan.

Goal 2-30 Incorporate green building and other sustainable building practices into development projects. Explore and adopt the use of green building standards and Leadership in Energy and Policy 2-30.1 Environmental Design (LEEDTM) or similar in both private and public projects. Policy 2-30.2 Promote sustainable building practices that go beyond the requirements of Title 24 of the California Administrative Code, and encourage energy-efficient design elements, as appropriate. Policy 2-30.3 Support sustainable building practices that integrate building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment. Goal 2-31 Conserve energy resources. Policy 2-31.1 Require the incorporation of energy conservation features into the design of all new construction and site development activities. Goal 2-34 Achieve waste recycling levels that meet or exceed State mandates. Achieve maximum waste recycling in all sectors of the community: residential, commercial, industrial, institutional, and construction. Policy 2-34.2 Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste generated in Rialto that is disposed of in landfills. Policy 2-34.3 Encourage the maximum diversion from landfills of construction and demolition materials through recycling and reuse programs. Goal 2-35 Reduce air pollution emissions from both mobile and stationary sources in the City. Policy 2-35.2 Require that new development projects incorporate design features that encourage ride sharing, transit use, park and ride facilities, and bicycle and pedestrian circulation. Policy 2-35.4 Require new development and significant redevelopment proposals to incorporate sufficient design and operational controls to prevent release of noxious odors beyond the limits of the development site. Goal 2-36 Reduce the amount of fugitive dust released into the atmosphere. Policy 2-36.1 Put conditions on discretionary permits to require fugitive dust controls. Policy 2-36.2 Support programs and policies of the South Coast Air Quality Management District regarding restrictions on grading operations at construction projects. Policy 2-36.3 Enforce regulations that do not allow vehicles to transport aggregate or similar material upon a roadway unless the material is stabilized or covered.

Policy 2-38.3

Goal 2-38	Mitigate against climate change.

Provide enhanced bicycling and walking infrastructure, and support public transit, including public bus service, the Metrolink, and the potential for Bus Rapid Transit (BRT).

2.3.4 - Rialto Municipal Code

Section 15.08.060 of the Rialto Municipal Code adopts by reference the 2019 edition of the California Green Building Standards Code.

SECTION 3: METHODS

3.1 - Approach to Analysis

Emission factors represent the emission rate of a pollutant over a given time or activity; for example, grams of NO_X per VMT or grams of NO_X per horsepower-hour of equipment operation. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factors (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. Activity levels measure how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or VMT per day. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was developed in collaboration with the SCAQMD and other air districts throughout the State. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with construction and operation from various land uses. Regional construction and operational emissions reported in this analysis were modeled using CalEEMod Version 2020.4.0.34 Air dispersion modeling was utilized to assess the proposed project's potential health risks using the American Meteorological Society/EPA Regulatory Model (AERMOD), which is the air dispersion model accepted by the EPA and the SCAQMD for preparing Health Risk Assessments (HRAs). Health risk calculations were completed using HARP2. EMFAC 2021 inventory data was utilized to calculate mobile source emissions for the HRAs, as well as energy consumption from construction and operation of the proposed project.

The modeling follows SCAQMD guidance where applicable from its CEQA Air Quality Handbook. The following criteria air pollutants and ozone precursors are assessed in this analysis:

- Volatile organic compounds (VOC)
- Nitrogen oxides
- Carbon monoxide
- Sulfur oxides
- Particulate matter equal to or less than 10 microns in diameter (PM₁₀)
- Particulate matter equal to or less than 2.5 microns in diameter (PM_{2.5})

Note that the proposed project would emit ozone precursors VOC and NO_x. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during via photochemical reactions between and among ozone precursor pollutants.

FirstCarbon Solutions 49 Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

³⁴ California Emissions Estimator Model (CalEEMod) Version 2022.1 was released for public use in May 2022, however, this version is still in soft release and not officially designated as the recommended emission model. Therefore, CalEEMod Version 2020.4.0 is used in this analysis.

At the time of this analysis, construction of the proposed project was anticipated to begin in July 2023 and be completed in approximately June 2024. The analysis utilizes estimated project trip generation data developed by Urban Crossroads for the proposed project. 35

3.1.1 - Project Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from both on-site and off-site activities. On-site emissions consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from soil disturbance. Additionally, paving operations and the application of architectural coatings would release VOC emissions. Off-site emissions result from motor vehicle exhaust from delivery vehicles, worker traffic and road dust (PM₁₀ and PM_{2.5}).

Equipment Tiers and Emission Factors

Equipment tiers refer to a generation of emission standards established by the EPA and ARB that apply to diesel engines in off-road equipment. The "tier" of an engine depends on the model year and horsepower rating; generally, the newer a piece of equipment is, the greater the tier it is likely to have. Excluding engines greater than 750 horsepower, Tier 1 engines were manufactured generally between 1996 and 2003. Tier 2 engines were manufactured between 2001 and 2007. Tier 3 engines were manufactured between 2006 and 2011. Tier 4 engines are the newest and some incorporate hybrid electric technology; they have been manufactured since 2007.

Construction emissions are generally calculated as the product of an activity factor and an emission factor. The activity factor for construction equipment is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, or the amount of fuel consumed in a given amount of time. The emission factor relates the process activity to the amount of pollutant emitted. Examples of emission factors include grams of emissions per VMT and grams of emissions per horsepower-hour. The operation of a piece of equipment is tempered by its load factor, which is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

3.1.2 - Project Operation

The operational-phase emissions are based on the development and operation of the proposed project and its associated activities. The modeling accounts for the average daily vehicle trips, energy usage, water demand, and wastewater and solid waste generation. For purposes of this analysis, hours of operation for the proposed project are 24 hours per day, 7 days per week.

³⁵ Urban Crossroads. 2023. Santa Ana and Lilac Warehouse Traffic Analysis. April 2023.

Transportation

As noted earlier, the analysis utilizes trip generation estimates developed by Urban Crossroads for the proposed project. According to the trip generation information provided therein, the proposed project would result in an estimated 310 daily passenger vehicle trips and 210 daily truck trips.³⁶

CalEEMod Version 2020.4.0 was used to quantify vehicle emissions using vehicle emission rates based on data obtained from the ARB's EMFAC 2017 Version 1.0.3 web database. To ensure a conservative analysis, the proposed project's operational emissions from mobile sources (i.e., vehicles) were first estimated utilizing the trip generation figure developed by Urban Crossroads and default CalEEMod fleet mix assumptions for the proposed project's trip-generating land uses. Then, a separate CalEEMod analysis was conducted for the proposed project's truck trips only. This analysis utilized the truck trip generation figure developed by Urban Crossroads and a fleet mix consisting solely of heavy-duty trucks. Trip lengths were modified from CalEEMod default values to assume that half the proposed project's truck trips may be to or from the Port of Los Angeles and/or Port of Long Beach, which are approximately 71 miles from the project site. The results of both analyses were then summed to establish a conservative "worst-case scenario" of the proposed project's maximum potential daily operational emissions from mobile sources. Please refer to the CalEEMod output sheets, notes, and calculations contained in Appendix A for more details.

The California Department of Justice (DOJ) has provided a document entitled, "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act," that provides guidance on CEQA analysis for warehouse projects and feasible mitigation measures. This guidance has been reviewed and incorporated into this analysis, as appropriate. The document also includes a recommendation to fully analyze the impacts from truck trips as a part of CEQA compliance, stating that, "CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations." As noted earlier, the truck trip lengths in CalEEMod were modified to account for the fact that a portion of the proposed project's truck trips may travel to or from the Port of Los Angeles and Port of Long Beach, resulting in trip length estimates that greatly exceed CalEEMod default values for the project site.

Other Operational Emissions

Solid Waste Disposal

Indirect emissions from waste generation are based on the CalEEMod default solid waste generation rates, which are based on data from the California Department of Resources, Recycling, and Recovery (CalRecycle).

Water/Wastewater

Emissions from this sector are associated with the embodied energy used to supply, treat, and distribute water, and then treat wastewater. Water consumption is based on CalEEMod default water use rates for the proposed project's land use types.

FirstCarbon Solutions

51

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

³⁶ Urban Crossroads. 2023. Santa Ana and Lilac Warehouse Traffic Analysis. April 2023.

³⁷ Department of Justice (DOJ). 2021. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.

Area Sources

Area sources are based on the CalEEMod defaults for use of consumer products, cleaning supplies, landscaping equipment, and architectural coatings.

Energy

Criteria pollutant emissions from this sector are generated from on-site natural gas combustion for space and water heating. GHG emissions from this sector account for both on-site and off-site natural gas combustion.

3.1.3 - Air Dispersion Modeling

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the EPA AERMOD (Version 22112) air dispersion model that is approved by the SCAQMD for air dispersion assessments. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from the project's construction and operational PM₁₀ exhaust emissions. The use of the AERMOD model provides a refined methodology for estimating construction and operational impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

Terrain elevations were obtained for the project site using the EPA Terrain Preprocessor (AERMAP) model, the AERMOD terrain data pre-processor. The urban dispersion option was used to describe the air dispersion in the local vicinity of the project. The air dispersion model assessment was performed using meteorological data from the Fontana Station, which is within Source Receptor Area (SRA) 34 and is located approximately 7.06 miles northwest of the project site.

3.1.4 - Air Dispersion Modeling—Construction

Receptor locations within the AERMOD model were placed at locations of existing residences surrounding the project. To evaluate the project's localized construction impacts, sensitive receptor height should be taken into account at the point of maximum impact. The SCAQMD recommends that all receptors are placed within the breathing zone at zero meters above ground level.

The on-site construction area sources were assumed to cover the entire construction area. The emissions from the on-site construction exhaust source were assumed to be emitted at a height of 5 meters above ground to account for the top of the equipment exhaust stack where the emissions are released to the atmosphere and the increase in the height of the emissions due to its heated exhaust.

The off-site construction vehicle emissions were represented in the AERMOD model as line volume sources with a release height of 10.2 feet (3.1 meters) for the diesel vehicles.

3.1.5 - Air Dispersion Modeling—Operation

Each operational emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model. The emission source configurations applied in this assessment are shown in Table 2.

Table 2: Summary of Operational Emission Source Configurations

Emission Source Type	Configuration	Relevant Assumptions
On-site Truck Traffic	Line Volume Sources	 Stack release height: 10.2 feet (3.1 meters) Vehicle Speed: 5 mph Length of the line source: distance from the facility entrance to the facility exit, following the designated truck path Vehicle types: heavy heavy-duty (HHDT), medium heavy-duty (MHDT), and light heavy-duty (LHDT) delivery trucks Emission factors: EMFAC2021
On-site Truck Idling	Line Volume and Volumes Sources	 Stack release height: 10.2 feet (3.1 meters) Idle Instances: Truck Parking Area: 50% of total truck trips Building Docking Area: 50% of total truck trips Entrance Gate Area: 100% of total truck trips Vehicle type: HHDT, MHDT and LHDT diesel delivery trucks Emission factors: EMFAC2021
Off-site Truck Traffic	Line Volume Sources	 Truck travel was estimated for project-generated off-site travel within approximately 1,000 feet of the project site. Three travel links from the project to outlying areas were identified based on the truck travel distribution provided in the project-specific traffic report, and emissions were estimated along each travel link. Vehicle speeds: 5 mph to 25 mph aggregated. Emission factors: EMFAC2021
Facility Operations	Project	• 24 hours per day/365 days per year
Appendix C: Health Risl	Assessments.	



SECTION 4: IMPACT ANALYSIS

This section summarizes the results of the air quality, greenhouse gas emissions, and energy analyses as guided by the CEQA Guidelines.

4.1 - Air Quality Analysis

4.1.1 - Environmental Setting

The project site is located in the South Coast Air Basin (SoCAB) within the jurisdiction of the SCAQMD. While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions (Table 3). If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts.

4.1.2 - Regional Significance Thresholds

The SCAQMD has developed the following regional and localized significance thresholds to evaluate construction and operational emissions within its jurisdiction.

Table 3: SCAQMD Regional Thresholds of Significance

Pollutant	Construction	Operation
NO _X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
SO _X	150 lbs/day	150 lbs/day
СО	550 lbs/day	550 lbs/day

Notes:

CO = carbon monoxide

lbs = pounds

NO_X= nitrogen oxides

PM₁₀= particulate matter with an aerodynamic resistance diameter of 10 micrometers or less

PM_{2.5}= particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

SO_X= sulfur oxides

VOC = volatile organic compounds

Source of regional thresholds: South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. March. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed April 26, 2023.

4.1.3 - Localized Significance Thresholds

The SCAQMD recommends that all air quality analyses include a localized assessment of both construction and operational emissions on nearby sensitive receptors. The SCAQMD has developed localized significance thresholds (LST) to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs represent maximum mass emissions from a project site that would not result in pollutant concentrations that exceed NAAQS or CAAQS. LSTs are based on ambient concentrations of that pollutant within the SRA³⁸ where a project is located, distance to the nearest sensitive receptor, and size of the project site, all of which are the primary factors that influence pollutant concentrations.

The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003, revised 2009) for guidance. ³⁹ The LST Methodology assists lead agencies in analyzing localized air quality impacts, particularly CO, NO_X, PM₁₀, and PM_{2.5}. The SCAQMD provides LST mass rate lookup tables for projects with active construction areas that are less than or equal to 5 acres, providing specific thresholds for 1-acre, 2-acre, and 5-acre project sites. These LST lookup values are provided to be used as a screening tool for identifying whether a more detailed analysis is needed for localized impacts. The appropriate LSTs can be determined based on the project's SRA, size, and distance to nearest sensitive receptor. The appropriate SRA for the LSTs is Central San Bernardino Valley (SRA 34) since this area includes the project site. Though the project site is approximately 13.68-acres, grading for the proposed project would result in a 3-acre maximum daily disturbed acreage. Thus, pursuant to SCAQMD guidance, LSTs for a 3-acre project site were linearly interpolated from the SCAQMD's 2-acre and 5-acre LSTs and utilized in this analysis. ⁴⁰ For operations, LSTs for 5-acre project sites were utilized. LSTs apply to CO, NO_X, PM₁₀, and PM_{2.5}. LSTs were obtained for sensitive receptors located 25 meters from the source area based on the proposed project's proximity to existing sensitive receptors.

Table 4 shows the applicable LSTs for NO_X, CO, PM₁₀, and PM_{2.5} for both construction and operational activities for sensitive receptors 25 meters away. If a project exceeds an applicable LST, then the SCAQMD recommends that project-specific air quality modeling be performed.

 Pollutant
 Construction LST
 Operation LST

 NO2/NOx
 203 lbs/day
 270 lbs/day

 PM10
 9 lbs/day
 4 lbs/day

 PM2.5
 5 lbs/day
 2 lbs/day

 CO
 1,230 lbs/day
 1,746 lbs/day

Table 4: SCAQMD Localized Significance Thresholds

³⁸ A source area is that area in which contaminants are discharged, and a receptor area is that area in which the contaminants accumulate and are measured. Any of the areas can be a source area, a receptor area, or both a source and receptor area.

³⁹ South Coast Air Quality Management District (SCAQMD). 2021. Localized Significance Thresholds. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed October 12, 2022.

South Coast Air Quality Management District (SCAQMD). Undated. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf. Accessed November 9, 2022.

Pollutant Construction LST Operation LST

Notes:

CO = carbon monoxide

lbs = pounds

LST = localized significance threshold

NO_X= nitrogen oxides

PM₁₀= particulate matter with an aerodynamic resistance diameter of 10 micrometers or less

PM_{2.5}= particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

SO_x= sulfur oxides

VOC = volatile organic compounds

Source of LSTs: South Coast Air Quality Management District (SCAQMD). 2009. Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed October 12, 2022.

4.1.4 - Carbon Monoxide Hotspot Thresholds

A carbon monoxide (CO) hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions.

Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light-duty vehicles have decreased tailpipe CO emissions by 96 percent for automobiles, and new cold weather CO standards have been implemented, effective for the 1996 model year. With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SoCAB have steadily declined. SoCAB is currently designated attainment regarding CO NAAQS and CAAQS.

The analysis prepared for CO attainment in the SoCAB by the SCAQMD can help evaluate the potential for CO exceedances in the SoCAB. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan and subsequent plan updates, peak carbon monoxide concentrations in the SoCAB are due to unusual meteorological and topographical conditions and not the impact of particular intersections. ⁴¹ Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and AQMPs. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. These modeling results and the determinations of this CO hot spot analysis is utilized

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

⁴¹ California Air Resources Board (ARB). 2021. 2005 South Coast Carbon Monoxide Plan. Website: https://ww2.arb.ca.gov/resources/documents/2005-south-coast-carbon-monoxide-plan. Accessed October 12, 2022.

in this analysis as the basis for determining whether the proposed project would result in a CO hot spot at impacted intersections and roadway segments.

4.1.5 - Health Risk Significance Thresholds

For pollutants without defined significance standards or air contaminants not covered by the standard criteria cited above, the definition of substantial pollutant concentrations varies. For TACs, "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered a prudent risk management level.

The SCAQMD has defined several health risk significance thresholds that it recommends lead agencies use in assessing a project's health risk impacts. The City of Rialto has not adopted its own set of thresholds. Therefore, the following SCAQMD thresholds are used for this analysis.

Project-Specific Health Risk Significance Thresholds

The SCAQMD has established the following project-specific health risk significance thresholds:

- Maximum Incremental Cancer Risk: >=10 in 1 million
- Hazard Index (project increment) >=1.0

A significant impact would occur if a project's impacts exceeded any of these thresholds.

Cumulative Health Risk Significance Thresholds

When the proposed project, in combination with one or more other projects exceeds the project-specific significance thresholds, the project is considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

4.1.6 - CEQA Air Quality Analysis

According to the CEQA Guidelines Appendix G Environmental Checklist, to determine whether impacts to air quality are significant environmental effects, the following questions are analyzed and evaluated.

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

Thresholds of Significance

This analysis uses the air quality significance thresholds contained in Appendix G of the CEQA Guidelines. A significant impact would occur if the proposed project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?

- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Consistency with Air Quality Management Plan

Impact AIR-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis

This analysis examines the proposed project's impact using three steps based on the SCAQMD's recommended criteria. The three steps are assessing:

- Step 1: Project's contribution to air quality violations
- Step 2: Consistency with basis of SCAQMD's AQMP
- Step 3: Compliance with applicable emission control measures in the AQMP

Step 1 represents an assessment of the overall impacts associated with the proposed project. As discussed further in AIR-2, the proposed project would not exceed the regional significance thresholds for criteria pollutant emissions from either project construction or operation. Furthermore, as analyzed in AIR-3, the proposed project would not result in a significant health risk to nearby sensitive receptors or have a localized significant air quality impact. The proposed project would not result in exceedances of SCAQMD's regional thresholds or other air quality standards, contribute to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations after the incorporation of recommended measures. Therefore, Step 1 does not indicate any significant impacts resulting from the implementation of the proposed project.

Step 2 examines the proposed project's consistency with assumptions made in the AQMP. The AQMP is based on land use patterns and forecasts contained in local general plans and other land use planning documents. The proposed project, which would consist of a dry storage warehouse, would be consistent with the City's General Plan and zoning designations for the project site. All five parcels comprising the project site are designated as Light Industrial according to the Rialto General Plan⁴² and zoned as Light Industrial (M-1) according to the Rialto Zoning Map.⁴³ The project site would not require a General Plan Amendment or rezone. As a result, the proposed project would be consistent with the Rialto General Plan and therefore also consistent with the growth assumptions made for the City of Rialto in the AQMP. In other words, the AQMP accounts for development of the proposed project at the project site.

SCAG is SCAQMD's partner in the preparation of the AQMP, providing the latest economic and demographic forecasts and developing transportation measures. Regional population, housing, and

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx

⁴² City of Rialto. 2010. Rialto General Plan. Website: https://www.yourrialto.com/DocumentCenter/View/1494/2010-General-Plan. Accessed October 29, 2022.

⁴³ City of Rialto. 2013. Rialto Zoning Map. Website: https://www.yourrialto.com/DocumentCenter/View/1513/Zoning-Map-July-2013. Accessed October 29, 2022.

employment projects developed by SCAG are based, in part, on a city's general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP and are incorporated into the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG to determine priority transportation projects and VMT in the SCAG region. Because the AQMP strategy is based on projections from local general plans, projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. Therefore, Step 2 does not indicate any significant impacts.

Step 3 is an analysis of the proposed project's compliance with applicable emission control measures included in the AQMP. The AQMP relies on the SCAQMD's rule and regulations for emission control, as well as all applicable State and federal regulations. The proposed project would be required to comply with all applicable rules and regulations, including SCAQMD Rule 403 (reducing fugitive dust during construction) and State Building Code requirements. The City of Rialto would verify that the proposed project would comply with these regulations as part of the demolition, grading, and construction permit issuance process and design review. Step 3 does not indicate any significant impacts.

Conclusion

As identified above, the proposed project would be within the development density allowed by the City's General Plan as well as the growth assumptions which form the basis of the applicable AQMP. In addition, the proposed project would not conflict with applicable emission control measures of the AQMP or result in an exceedance in regional significance thresholds. This impact is less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Level of Significance After Mitigation

Less than significant impact.

Cumulative Impacts

Impact AIR-2:

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Impact Analysis

Within the SCAQMD, this impact is related to regional criteria pollutant impacts, which are determined by comparing the proposed project's construction and operational emissions to SCAQMD's regional significance thresholds. Emissions associated with the proposed project were modeled using CalEEMod model version 2020.4.0. As provided by the project applicant, the import

of approximately 36,500 cubic yards of fill material may be required as part of the grading and construction of the proposed project. Detailed modeling assumptions and methodology are contained in Appendix A. Unmitigated results are provided in Table 5.

Table 5: Unmitigated Emissions by Construction Activity (Max Emissions per Day)

		Po	llutants (Po	utants (Pounds per Day)			
Construction Activity	voc	NO _x	со	SO _X	PM ₁₀	PM _{2.5}	
2023	2023						
Demolition	2.39	25.17	21.04	0.06	2.8	1.3	
Grading	3.92	66.43	36.11	0.23	7.59	3.77	
Building Construction	2.66	18.63	27.05	0.07	1.86	1.05	
2024							
Building Construction	2.49	17.65	26.29	0.07	1.77	0.97	
Paving	1.71	9.56	15.15	0.02	0.52	0.45	
Architectural Coating	36.01	1.33	3.56	0.01	0.23	0.12	
Frontage Improvements	2.14	14.80	21.33	0.04	1.14	0.74	
Overlap of Building Construction, Paving, Architectural Coating, and Frontage Improvements	42.34	43.34	66.57	0.14	3.67	2.27	
SCAQMD Significance Thresholds	75	100	550	150	150	55	
Emissions Exceed Thresholds?	No	No	No	No	No	No	

Notes:

CO = carbon monoxide

lbs = pounds

NO_X= nitrogen oxides

PM₁₀= particulate matter with an aerodynamic resistance diameter of 10 micrometers or less

PM_{2.5}= particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

SO_X= sulfur oxides

VOC = volatile organic compounds

Source of Emissions: CalEEMod Output (Appendix B), showing the maximum daily emissions from summer and winter modeling.

Source of regional thresholds: South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. March. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed April 26, 2023.

As shown in Table 5, construction of the proposed project would not result in any emissions that would exceed SCAQMD maximum daily emissions thresholds.

Operational emissions generated by operation of the proposed project were estimated using CalEEMod Version 2020.4.0 and are summarized in Table 6. This operational analysis represents the total estimated emissions expected to be associated with the operation of the proposed project. As shown, operational emissions generated by the proposed project would be below SCAQMD significance thresholds.

Table 6: Unmitigated Operational Air Quality Emissions (Max Emissions per Day)

	Pollutants (Maximum Pounds per Day)					
Emission Source	voc	NOx	со	SO _X	PM ₁₀	PM _{2.5}
Area	6.44	<0.01	0.03	<0.01	<0.01	<0.01
Energy	0.02	0.17	0.14	<0.01	0.01	0.01
Mobile	1.97	2.99	21.70	0.05	5.07	1.38
Mobile – Trucks Only	0.73	45.85	10.52	0.23	8.17	2.58
Stationary	0.29	0.80	0.73	<0.01	0.04	0.04
Daily Maximum Total	9.44	49.81	33.00	0.29	13.30	4.01
SCAQMD Thresholds	55	55	550	150	150	55
Emissions Exceed Thresholds?	No No No No No					

Notes:

CO = carbon monoxide

lbs = pounds

NO_X= nitrogen oxides

PM₁₀= particulate matter with an aerodynamic resistance diameter of 10 micrometers or less

PM_{2.5}= particulate matter with an aerodynamic resistance diameter of 2.5 micrometers

SO_X= sulfur oxides

VOC = volatile organic compounds

Source of Emissions: CalEEMod Output (Appendix B); showing the maximum daily emissions from summer and winter modeling.

Source of regional thresholds: South Coast Air Quality Management District (SCAQMD). 2023. South Coast AQMD Air Quality Significance Thresholds. March. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed April 26, 2023.

As shown above, construction and operation of the proposed project would not result in emissions that exceed SCAQMD regional emissions thresholds of significance for any pollutant. It should be noted that the operational emissions analysis shows the total estimated emissions associated with the operation of the proposed project. Existing land uses and associated emissions are not considered in the above operational emissions estimates. In other words, emissions associated with the project site's existing land uses have not been deducted from the proposed project's operations emissions inventory to estimate "net" emissions that would be generated by the proposed project. As such, this analysis represents a conservative estimate of the proposed project emissions.

Conclusion

As the proposed project would not generate construction or operational emissions at levels above the SCAQMD significance thresholds, impacts related to a cumulatively considerable net increase of any criteria pollutant would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Sensitive Receptors

Impact AIR-3:

The proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis

This impact evaluates the potential for the proposed project's construction and operational emissions to expose sensitive receptors to substantial pollutant concentration. Sensitive receptors are defined as those individuals who are sensitive to air pollution including children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as NO₂ and CO), commercial and/or industrial facilities would be considered sensitive receptors. The nearest sensitive receptors to the proposed project would be single-family residences that are directly adjacent to the west of the project site, along Trenmar Lane. The next closest sensitive receptors would also be single-family residences that are located approximately 80 feet northwest of the project site, across Santa Ana Avenue

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** Localized significance threshold (LST) assessment: emissions and air quality impacts during project construction or operation must be below the applicable LSTs to screen out of needing to provide a more detailed air quality analysis. If the proposed project exceeds any applicable LST when the mass rate lookup tables are used as a screening analysis, then project-specific air quality modeling may be performed to determine significance.
- **Criterion 2:** A CO hotspot assessment must demonstrate that the project would not result in the development of a CO hotspot that would result in an exceedance of the CO ambient air quality standards.
- **Criterion 3:** TAC analysis must demonstrate that the project would not result in significant health risk impacts to sensitive receptors during construction.

Criterion 1: Localized Significance Threshold Analysis—Criteria Pollutants

Localized Construction Analysis

Table 7 presents the proposed project's maximum daily on-site emissions compared with the applicable LSTs for SRA 34, Central San Bernardino Valley. As explained earlier, LSTs for a 3-acre project site were utilized based on the proposed project's anticipated maximum daily disturbed acreage. These LSTs were linearly interpolated from the SCAQMD's 2-acre and 5-acre LSTs. LSTs were obtained for sensitive receptors located 25 meters from the source based on the project site's proximity to existing sensitive receptors. The CalEEMod analysis assumes that all construction

activities would comply with SCAQMD Rule 403 for fugitive dust, as is mandatory for all construction projects in SoCAB.

Table 7: Construction Localized Significance Screening Analysis

	On-site Emissions (pounds per day)							
Activity	NO _X	со	PM ₁₀	PM _{2.5}				
2023								
Demolition	21.48	19.64	2.47	1.15				
Grading	34.52	28.05	5.07	2.74				
Building Construction	14.38	16.24	0.70	0.66				
2024								
Building Construction	13.44	16.17	0.61	0.58				
Paving	9.52	14.63	0.47	0.43				
Architectural Coating	1.22	1.81	0.06	0.06				
Frontage Improvements	14.30	20.01	0.62	0.59				
Overlap (Building Construction, Paving, Arc. Coating, and Frontage Improvements)	38.48	52.61	1.76	1.66				
Total Construction Duration (2023-2024)								
Maximum Daily On-site Construction Emissions	38.48	52.61	5.07	2.74				
Localized Significance Thresholds	203	1,230	9	5				
Exceeds Threshold?	No	No	No	No				

Notes:

CO = carbon monoxide

 NO_X = oxides of nitrogen

 PM_{10} = particulate matter less than 10 microns in diameter

PM_{2.5} = particulate matter less than 2.5 microns in diameter

Source of emissions: Appendix A.

Source of thresholds: South Coast Air Quality Management District (SCAQMD). 2009. LST Methodology Appendix C –

Mass Rate LST Look-Up Table. October.

As shown in Table 7, the proposed project's maximum daily on-site emissions would not exceed SCAQMD LSTs for NO_x , CO, PM_{10} and $PM_{2.5}$. Therefore, localized construction impacts related to these air pollutants would be less than significant.

Localized Operational Analysis

Like the construction LST analysis above, the applicable operational LSTs were obtained for a project located in SRA 34, Central San Bernardino Valley, with the nearest sensitive receptor being 25 meters away. LSTs assumed a 5-acre project size, which is the largest project size used for analysis in the LST guidance document. The LST Methodology recommends that only on-site emissions are evaluated

using LSTs. Because most of the proposed project's mobile source emissions would occur on the local and regional roadway network away from the project site, a trip length of 0.5 mile was used in the modeling input assumptions to account for on-site emissions and from mobile sources. The 0.5mile on-site trip length is a conservative estimate that takes into account the maximum project site distance a vehicle could travel, not the most likely or fastest route, to ensure all potential impacts are considered. Table 8 presents the proposed project's maximum daily on-site emissions compared with the appropriate LSTs.

Table 8: Operational Localized Screening Significance Analysis

	Pounds per Day				
Emissions Source	NO _X CO		PM ₁₀	PM _{2.5}	
Area	<0.01	0.03	<0.01	<0.01	
Energy	0.17	0.14	0.01	0.01	
Mobile	0.57	3.48	0.20	0.06	
Mobile – Trucks Only	5.04	4.13	0.10	0.03	
Stationary	0.80	0.73	0.04	0.04	
Maximum Daily On-site Operational Emissions	6.58	8.51	0.36	0.14	
Localized Significance Thresholds	270	1,746	4	2	
Exceeds Threshold?	No	No	No	No	

Notes:

CO = carbon monoxide

NO_X = oxides of nitrogen

PM₁₀ = particulate matter less than 10 microns in diameter

PM_{2.5} = particulate matter less than 2.5 microns in diameter

Source of Emissions: Appendix A.

Source of thresholds: SCAQMD, LST Methodology Appendix C - Mass Rate LST Look-Up Table. October 2009.

As shown in Table 8, the proposed project's maximum daily on-site emissions would not exceed SCAQMD LSTs for NO_x, CO, PM₁₀ and PM_{2.5}. Therefore, localized operations impacts related to these air pollutants would be less than significant.

Criterion 2: Carbon Monoxide Hotspot Analysis

As previously discussed, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods in the SCAQMD's 1992 CO Plan. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). 44 These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and

FirstCarbon Solutions Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AO-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AO-GHG-Energy Report.docx

South Coast Air Quality Management District (SCAQMD). 2003. Final 2003 AQMP Appendix V, Modeling and Attainment Demonstrations. August.

Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. Therefore, if operation of the proposed project results in less than 100,000 daily vehicle trips at affected intersections or roadways segments under existing plus project conditions, then a less than significant CO impact would occur.

The Traffic Analysis prepared for the proposed project by Urban Crossroads identified that the proposed project would generate fewer than 60 total new peak-hour trips and fewer than 100 total new passenger car equivalent (PCE) peak-hour trips. ⁴⁵ The analysis further determined that the proposed project would neither individually nor cumulatively result in less than acceptable level of service at surrounding intersections. These factors indicate that the proposed project would not generate the traffic volumes or congestion necessary to result in CO hotspots. Therefore, the proposed project would not result in a significant impact to air quality regarding CO hotspots.

Criterion 3: TAC Analysis

Toxic Air Pollutants—On-site Workers

A variety of State and national programs protect workers from safety hazards, including high air pollutant concentrations. 46,47

On-site workers are not required to be addressed through the HRA process. A document published by the California Air Pollution Control Officers Association (CAPCOA), Health Risk Assessments for Proposed Land Use Projects, indicates that on-site receptors are included in risk assessments if they are persons not employed by the project. ⁴⁸ Persons not employed by the proposed project would not remain on-site for any significant period. Therefore, an HRA for on-site workers is not required or recommended. No further discussion is necessary.

Health Risk Assessments

During construction and operation, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. The SCAQMD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery vehicles during construction and operation. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM₁₀.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or

66

⁴⁵ Urban Crossroads. 2023. Santa Ana and Lilac Warehouse Traffic Analysis. April 2023.

⁴⁶ Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling/data/CH_250700.html. Accessed October 24, 2022.

⁴⁷ Centers for Disease Control and Prevention (CDC). 2012. Construction. Website: www.cdc.gov/niosh/construction/. Indoor Environmental Quality—website: www.cdc.gov/niosh/topics/indoorenv/constructionieq.html. Accessed October 24, 2022.

California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

The Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommend method for the estimation of cancer risk is shown in the equations.

Cancer Risk = C_{DPM} x Inhalation Exposure Factor (EQ-1)

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

 C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

Inhalation Exposure Factor = CPF x EF x ED x DBR x AAF/AT (EQ-2)

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 (mg/kg-day)⁻¹ for DPM

EF = Exposure frequency (days/year)

ED = Exposure duration (years of construction)

AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)

AT = Averaging time period over which exposure is averaged (days)

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a Hazard Index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To quantify non-carcinogenic impacts, the HI approach was used.

$$HI = C_{ann}/REL$$
 (EQ-3)

Where:

HI = chronic hazard index

 C_{ann} = annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$) REL = reference exposure level above which a significant impact is assumed to occur ($\mu g/m^3$)

The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. OEHHA has defined a REL for DPM of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

Toxic Air Contaminant Construction Analysis

Major sources of DPM during construction include off-road construction equipment and heavy-duty delivery truck activities.

The results of the HRA prepared for project construction, for cancer risk and long-term chronic cancer risk, are summarized below. Air dispersion modeling was utilized to assess the project's potential health risks using AERMOD (version 22112). Exhaust emissions of DPM (as PM₁₀ exhaust) were estimated using CalEEMod (version 2020.4.0). Detailed parameters, a description of the methodology, and complete calculations are contained in Appendix C. Table 9 summarizes the emission rates of unmitigated DPM during construction of the project.

Table 9: Project DPM Construction Emissions—Unmitigated

On-site DPM—Area 1 (grams/sec)	Off-site DPM—Segment 1 (grams/sec)	Off-site DPM—Segment 2 (grams/sec)	Off-site DPM—Segment 3 (grams/sec)	
Annual Construction Emissions—Unmitigated				
0.003243 0.000007 0.000001 0.000006				
Source: Appendix C (Health Risk Assessments).				

The estimated health and hazard impacts at the Maximally Impacted Sensitive Receptor (MIR) from the project's unmitigated construction emissions are provided in Table 10.

Table 10: Estimated Health Risks and Hazards During Project Construction—Unmitigated

Source	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index
Risks and Hazards at the MIR ¹	6.058	0.0068
Significance Threshold	10	1
Exceeds Individual Source Threshold?	No	No

Notes:

MIR = Maximally Impacted Sensitive Receptor

Source: Appendix C (Health Risk Assessments).

The MIR during construction, which is the sensitive receptor that has the highest cancer risk and the highest non-cancer hazard index, was determined existing single-family dwelling unit located approximately 110 feet (33.6 meters) west of the project site. As noted in Table 10, the project's construction DPM emissions would not exceed the SCAQMD's cancer risk significance threshold or non-cancer hazard index significance threshold at the MIR. Therefore, the project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Toxic Air Contaminant Operational Analysis

The proposed project would generate passenger vehicle trips from employees, visitors, and light-duty delivery vehicles traveling to and from the project site; however, the proposed project would also be served with daily truck deliveries. The main source of DPM from the long-term operations of warehouses is from combustion of diesel fuel in diesel-powered engines in heavy-duty trucks. Motor vehicle emissions refer to DPM exhaust emissions from the motor vehicle traffic that would travel to and from the project site each day. An estimate of the number of vehicle trips that the proposed project would generate was provide in the project-specific Traffic Analysis, as shown in Table 11.

Table 11: Vehicle Trip Generation During Operations (Daily)

Vehicle Type	Daily Trips	
Passenger Cars	310	
2-Axle Trucks	6	
3-Axle Trucks	58	
4+-Axle Trucks	146	
Total Project Trips (Actual Vehicles) 520		
Source: Urban Crossroads. 2023. Santa Ana and Lilac Warehouse Traffic Analysis. April 2023.		

Operational emissions for the proposed project were assessed assuming the first year of operations would occur in 2024. The emission factors, AERMOD files, emission estimation spreadsheets, and

¹ The MIR was determined to be an existing single-family dwelling unit located approximately 110 feet (33.6 meters) southwest of the project site.

HARP2 files used to estimate motor vehicle DPM emissions during project operations are provided in Appendix C.

The results HRA prepared for project operations, for cancer risk and long-term chronic cancer risk, are summarized below. Air dispersion modeling was utilized to assess the proposed project's potential health risks using AERMOD. Exhaust emissions of DPM (as PM₁₀ exhaust) were estimated using EMFAC2021. The OEHHA-recommended values for the various cancer risk parameters used in the operational HRA are provided below in Table 12. The parameters and methodology are summarized in Section 4-Modeling Parameters and Assumptions. Detailed calculations are provided in Appendix C.

Table 12: Exposure Assumptions for Cancer Risk

	Exposure	Frequency	Exposure	Age	T '	Daily Breathing
Receptor Type	hours/day	days/year	Duration (years)	Sensitivity Factors	Time at Home Factor (%)	Rate ¹ (I/kg-day)
Sensitive/Residential—Infant (Third Trimester)						
Third Trimester	24	350	0.25	10	1	361
0–2 years	24	350	2	10	1	1,090
Sensitive Receptor—Child						
>2-16 years	24	350	14	3	1	745
Sensitive Receptor—Adult						
> 16 to 30 years	24	350	14	1	73	335
> 30 years	24	350	0	1	73	290

Notes

(I/kg-day) = liters per kilogram body weight per day Source: Appendix C (Health Risk Assessments).

An operational HRA was performed to determine calculate the cancer health risks and the non-hazard indices for sensitive receptors within approximately 2,000 feet of the project boundary. The results of this analysis are summarized in Table 13.

Table 13: Summary of Health Risk Impacts from Project Operations (30-Year Exposure)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index
Operations Only		
Risks and Hazards at the MIR over 30- year exposure	2.749	0.0006
SCAQMD Significance Threshold	10	1
Exceeds Individual Source Threshold?	No	No

The daily breathing rates for sensitive/residential receptors assume the 95th percentile breathing rates for all individuals.

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index
Notes: MIR = Maximally Impacted Sensitive Recepto SCAQMD = South Coast Air Quality Managem Source: Appendix C (Health Risk Assessments	ent District	

The maximum cancer risks at the MIR over a 30-year operational exposure duration would be less than 10 in one million, and the maximum hazard index for chronic HI would be less than 0.1. As noted in Table 13, the health risks and hazard index are below the SCAQMD's thresholds of significance at the MIR. Furthermore, although construction and operational impacts are considered separately, combined exposure from construction and operations would not exceed the applicable health risk thresholds. Therefore, the proposed project's operation would not expose sensitive receptors to substantial pollutant concentrations.

Cumulative Toxic Air Contaminant Operational Analysis

As previously discussed, projects that exceed project-specific significance thresholds are considered by the SCAQMD cumulatively considerable. Conversely, projects that do not exceed project-specific thresholds are generally not considered cumulatively significant. As discussed in Criteria 1 through 3, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Since the proposed project would not exceed project-specific thresholds, it would not be considered to result in cumulatively significant impacts.

Conclusion

As demonstrated in the discussions above, nearby sensitive receptors would not be exposed to substantial pollutant concentrations during construction or operation of the proposed project. Therefore, the proposed project would result in a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Objectionable Odors

Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Impact Analysis

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Odor-related symptoms reported in

several studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomachache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation.⁴⁹

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations. The SCAQMD's resolution activity for odor compliance is mandated under California Health and Safety Code Section 41700 and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."

The SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District has screening distances for common odor sources, which are used herein as a guide to assess whether the proposed facilities could generate odors which could affect a substantial number of people. Projects that would site one of the listed land uses farther than the applicable screening distances from an existing receptor would not likely have a significant impact. These screening distances by type of odor source are listed in Table 14.

Table 14: Screening Levels for Potential Odor Sources

Odor Source	Screening Distance	
Wastewater Treatment Facilities	2 miles	
Sanitary Landfill	1 mile	
Transfer Station	1 mile	
Composting Facility	1 mile	
Petroleum Refinery	2 miles	
Asphalt Batch Plant	1 mile	
Chemical Manufacturing	1 mile	
Fiberglass Manufacturing	1 mile	
Painting/Coating Operations (e.g., auto body shop)	1 mile	
Food Processing Facility	1 mile	
Feed Lot/Dairy	1 mile	
Rendering Plant	1 mile	
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigated Air Quality Impacts.		

South Coast Air Quality Management District (SCAQMD). 2007. Odor Detection, Mitigation and Control Technology Forum and Roundtable Discussion. 2007. Website: http://www.aqmd.gov/docs/default-source/technology-research/Technology-Forums/odorforumsummary.pdf. Accessed November 17, 2022.

Construction Odors

Potential sources that may emit odors during construction activities include exhaust from diesel-fueled construction equipment. However, because of the low intensity of these emissions, intermittent and short-term nature of construction activities, and highly diffusive properties of diesel exhaust, a substantial number of nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques, and odors would be typical of most construction-sites and temporary in nature. This impact would be less than significant.

Operational Odors

The proposed project would develop and operate a warehouse building with ancillary office space. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The proposed project would not engage in any of these activities and would not be considered an odor generator as identified in Table 14. Therefore, the proposed project would not be considered a generator of objectionable odors during operations.

Conclusion

Neither construction nor long-term operations of the proposed project is anticipated to generate any significant objectionable odors that affect a substantial number of people. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. This impact would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

4.2 - Greenhouse Gases Impact Analysis

4.2.1 - Significance Thresholds

The SCAQMD currently recommends a 10,000 MT CO₂e per year GHG emission threshold for industrial projects for which it is the lead agency. However, the City of Rialto has instead selected the SCAQMD's more stringent draft 3,000 MT CO₂e per year threshold for assessment of the proposed project's GHG emissions.

The SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document—Interim CEQA Greenhouse Gas Significance Threshold (Interim GHG Thresholds) that could be applied by

lead agencies.⁵⁰ The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA Guidelines.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a
 project is consistent with a qualifying local GHG reduction plan, it does not have significant
 GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent
 with all projects within its jurisdiction. A project's construction emissions are averaged over 30
 years and are added to the project's operational emissions. If a project's emissions are below
 one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MT CO₂e per year.
 - Based on land use type: residential: 3,500 MT CO₂e per year; commercial: 1,400 MT CO₂e per year; or mixed use: 3,000 MT CO₂e per year.
- Tier 4 has the following options:
 - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
 - Option 3: 2020 target for service population (SP), which includes residents and employees: 4.8 MT CO₂e/SP/year for projects and 6.6 MT CO₂e/SP/year for plans.
 - Option 3: 2035 target: 3.0 MT CO₂e/SP/year for projects and 4.1 MT CO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD provided substantial evidence in support of its threshold approach. The SCAQMD discusses its draft thresholds in the following excerpt:⁵¹

The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimately contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.

-

⁵⁰ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October.

⁵¹ South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document. October.

As described below, staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

In summary, the SCAQMD's draft 3,000 MT CO_2 e threshold uses the Executive Order S-3-05 year 2050 goal as the basis for the Tier 3 screening level. As noted, Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels and would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate. However, it is worth noting that the recently-passed AB 1279 mandates the State to reduce GHG emissions 85 percent below 1990 by 2045.

To be consistent with State goals detailed in SB 32, EO B-30-15, and EO S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030, a scaled screening GHG threshold can be developed for the anticipated proposed project operational year of 2024. This scaled threshold builds on, and accelerates the attainment of, the targets included in AB 32. Though the SCAQMD has not published a quantified threshold beyond 2020, a threshold of 2,520 MT CO_2e per year would be the appropriate scaled GHG threshold for the buildout year of 2024 based on the GHG reduction goals of SB 32 and EO B-30-15. This is calculated as: 2,520 = 3,000–((2024–2020) * {[3,000–3,000 * (1–40%)]/10}).

4.2.2 - CEQA Greenhouse Gas Emissions Analysis

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Greenhouse Gas Inventory

Impact GHG-1: The proposed project would generate direct and indirect greenhouse gas emissions and potentially result in a significant impact on the environment.

Impact Analysis

Construction Emissions

The proposed project would generate GHG emissions during construction activities resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod Version 2020.4.0.

Table 15 presents the proposed project's total construction emissions, which are amortized over the assumed lifetime of the project (30 years) and added to annual operational emissions.

Table 15: Estimated Construction-Related Greenhouse Gas Emissions

Construction Activity	Total GHG Emissions (MT CO₂e per year)		
Demolition (2023)	55		
Grading (2023)	343		
Building Construction (2023)	250		
Building Construction (2024)	400		
Architectural Coating (2024)	13		
Paving (2024)	21		
Frontage Improvements (2024)	32		
Total Project Construction			
Total Construction GHG Emissions	1,115		
Amortized Construction GHG Emissions (30 years) ¹	37		
Notes: GHG = greenhouse gas MT CO ₂ e = metric ton carbon dioxide equivalent Emissions may not add up due to rounding. ¹ Construction GHG emissions are amortized over the anticipated 30-year lifetime of the project. Source: Appendix B			

Operational Emissions

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2024 operational year, following the completion of construction. Sources for operational emissions are summarized below. Sources for operational GHG emissions include:

FirstCarbon Solutions Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.dc

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- Natural Gas: These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. Natural gas uses could include heating water, space heating, dryers, stoves, or other uses.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- Area Sources: These emissions refer to those produced during activities such as landscape maintenance.
- Water Transport: These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- Waste: These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

Table 16 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 16, the proposed project would generate approximately 5,845 MT CO_2e per year after the inclusion of 37 MT CO_2e per year from project construction.

Table 16: Estimated Operations-Related Greenhouse Gas Emissions

Emission Source	Total GHG Emissions (MT CO₂e per year)			
Project Operation				
Area	<1			
Energy	180			
Mobile	802			
Mobile–Trucks	4,423			
Stationary	1			
Waste	142			
Water	260			
Amortized Construction Emissions ¹	37			
Total Project Operational GHG Emissions	5,845			
Adjusted SCAQMD GHG Threshold	2,520			
Emissions Exceed Threshold?	Yes			
Notos				

Notes

MT CO_2e = metric tons carbon dioxide equivalent

Source: Appendix B

Construction GHG emissions are amortized over the anticipated 30-year lifetime of the project.

As shown in Table 16, the proposed project operations are estimated to result in an annual GHG emissions inventory of approximately 5,845 MT CO₂e. As discussed, the adjusted significance threshold for the proposed project, which is based on the SCAQMD's draft 3,000 MT CO₂e threshold, is 2,520 MT CO₂e per year. Therefore, without mitigation, this would be considered a potentially significant impact. To reduce the proposed project's annual GHG emissions to below this threshold, Mitigation Measure (MM) GHG-1 is required, which stipulates that the project applicant purchase carbon credits or offsets in an amount sufficient to offset the proposed project's annual GHG emissions to below the 2,520 MT CO₂e threshold of significance. Based on the current estimate of the proposed project's annual GHG emissions inventory, shown in Table 16, this would be equivalent to no less than 3,325 MT CO₂e per year for the first 30 years of proposed project operations, or 99,750 MT CO₂e total. Implementation of MM GHG-1 would offset the impact of the proposed project's GHG emissions to below the 2,520 MT CO₂e per year threshold of significance and therefore result in a less than significant impact.

Conclusion

After implementation of MM GHG-1, the project's construction and operational GHG emissions would not result in a significant impact on the environment and impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GHG-1

Prior to the issuance of any certificate of occupancy for the proposed project, the project applicant shall provide the City with documentation, to the City's satisfaction, that demonstrates verifiable purchases of carbon credits in an amount sufficient to offset the proposed project's greenhouse gas emissions beyond the adopted significance threshold of 2,520 MT CO₂e per year for the first 30 years of project operations. This would be equivalent to no less than 3,325 MT CO₂e per year or 99,750 MT CO₂e total, based on current estimates of the proposed project's annual GHG emissions inventory.

All purchased carbon credits shall be pursuant to the following performance standards and requirements: (i) the carbon credits shall achieve real, permanent, quantifiable, verifiable, enforceable, and additional reductions as set forth in California Health and Safety Code Sections 38562(d)(1) and (d)(2). Such credits shall be based on protocols consistent with the criteria set forth by Section 95972, subdivision (a), of Title 17 of the California Code of Regulations, as determined by an expert qualified to make such a determination, and shall not include credits originating outside of California, except to the extent that the quality of the credits and their sufficiency under the standards set forth herein, can be verified by an expert qualified to make such a determination.

As an alternative to purchasing carbon credits, the project applicant may elect to contribute to carbon offsets through a local or regional program or institution in an amount sufficient to offset the proposed project's GHG emissions by the previously identified amounts. Contributions to a local or regional program or institution may include, but are not limited to, funding for renewable energy infrastructure or technologies beyond what would otherwise be required for compliance with existing laws and regulations. Carbon offsets, expressed in an amount of MT CO_2e per year, realized due to contributions made by the project applicable for this purpose shall reduce the required MT CO_2e reductions contained in this mitigation by an equal amount and be pursuant to the following performance standards and requirements: (i) the carbon offsets shall achieve real, permanent, quantifiable, verifiable, and enforceable reductions as set forth in California Health and Safety Code Sections 38562(d)(1) and (d)(2); and (ii) one carbon offset shall mean the past reduction or sequestration of one MT CO_2e that is "not otherwise required" (CEQA Guidelines Section 15126.5(c)(3)).

regulation of an agency adopted to reduce the emissions of greenhouse gases.

Level of Significance After Mitigation

Less than significant impact.

Greenhouse Gas Reduction Plans

Impact GHG-2:	The proposed project would not conflict with any applicable plan, policy or

Impact Analysis

This impact is addressed by assessing the proposed project's consistency with the applicable measures, policies, and strategies contained in the ARB's 2017 Scoping Plan, 2022 Scoping Plan, and the SCAG 2020-2045 RTP/SCS. A consistency analysis for each of these plans is presented below.

2017 Scoping Plan

The 2017 Scoping Plan summarizes key policies that contribute to GHG reduction. Table 17 provides an analysis of the proposed project's consistency with the applicable 2017 Scoping Plan measures.

Table 17: 2017 Scoping Plan Consistency

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	Not applicable. This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	Not applicable . This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed project would comply with the applicable

2017 Scoping Plan Update Reduction Measure	Project Consistency
	Title 24 Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Not applicable. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	Not applicable. This measure applies to vehicle manufactures and does not apply to individual development projects. Nonetheless, implementation of this measure over time would serve to further reduce the proposed project's GHG emissions as ZEVs increase their numbers within Statewide fleets.
Sustainable Freight Action Plan The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero-emission operation and maximize near zero-emission freight vehicles and equipment powered by renewable energy by 2030.	Not applicable. This measure calls upon State agencies and regulators to implement recommendations of the California Sustainable Freight Action Plan. The proposed project's future warehouse users may be subject to, or influence by, future implementation of these recommendations.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	Not applicable. This measure revolves around ARB's SLCP Reduction Strategy that was released in April 2016 as a result of SB 650. SB 650 required the State to develop a strategy to reduce emissions of SLCPs. DPM reductions have come from strong efforts to reduce on-road vehicle emissions. Car and truck engines used to be the largest sources of anthropogenic black carbon emissions in California, but the State's existing air quality policies will virtually eliminate black carbon emissions from onroad diesel engines within 10 years. These policies are based on existing technologies.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	Not applicable. The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Not applicable. The proposed project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.docx 80

2017 Scoping Plan Update Reduction Measure	Project Consistency
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the Governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	Not applicable . The project site is in a built-up area and would not be considered natural or working lands.

Source: California Air Resource Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed October 12, 2022.

As discussed in Table 17, the proposed project would not conflict with any applicable 2017 Scoping Plan Update measures.

2022 Scoping Plan

The 2022 Scoping Plan addresses the recent signing of AB 1279, which codified Executive Order B-55-18's target for California to achieve and maintain carbon net neutrality by 2045 (equivalent to a reduction in Statewide anthropogenic GHG emissions of 85 percent below 1990 levels). The 2022 Scoping Plan establishes a scenario by which the State may achieve this goal by 2045 or earlier.

The 2022 Scoping Plan reaffirms and clarifies the role of local governments in achieving the State's climate goals, particularly as it concerns the approval of new land use development projects and their environmental review under CEQA. In other words, the 2022 Scoping Plan considers these approaches to evaluate whether a project may have a less than significant impact on GHG emissions.

The first approach involves consistency with a GHG reduction plan, such as a CEQA-qualified CAP. However, the City of Rialto has not developed such a CAP. Therefore, this approach is not applicable to the proposed project.

The second approach involves determining whether a project would result in net-zero GHG emissions. However, the 2022 Scoping Plan acknowledges that this approach may not be appropriate or even feasible for every project. Therefore, since the proposed project would not result in net-zero GHG emissions, this approach is not applicable to the proposed project.

The third approach involves assessing a project's consistency with key project attributes that have been demonstrated to reduce operational GHG emissions while advancing fair housing. Although the proposed project is not residential in nature, an evaluation of the project's consistency with the 2022 Scoping Plan by assessing the project's consistency with key project attributes identified in the 2022 Scoping Plan remains a valid approach. An evaluation of the project's consistency with the Scoping Plan serves as a roadmap for evaluating a project's current design, and to determine whether it complies with current policies and planned reduction measures for GHG emissions. The comparison of a project design to Scoping Plan proposals is not by itself a metric for determining project-level significance, but a step in showing how the project supports current regulations and is aligned with future GHG reduction strategies in development stages.

Table 18 presents the proposed project's consistency with the 2022 Scoping Plan.

Table 18: Proposed Project Consistency with 2022 Scoping Plan Greenhouse Gas Emission Reduction Strategies

Scoping Plan Measure	Project Consistency
Light-Duty Vehicles: Smart Growth/Reduce Vehicle Miles Traveled. VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	Consistent. As described in the project-specific Traffic Analysis, ⁵² the proposed project would result in 13.8 VMT per employee, which is an 18.34 percent reduction compared to the threshold of 16.9 VMT per employee. As such, the proposed project would not conflict with this measure. Furthermore, the Scoping Plan does not rely upon on VMT reductions from the freight and truck transportation sector.
Deploy ZEVs. Medium-Heavy and Heavy Heavy-Duty Trucks. This measure is supported by Executive Order N79-20 and plans in the AB 74 ITS Report: 100 percent of MD/HDV sales are ZEV by 2040.	Consistent with mitigation. Medium-heavy and heavy heavy-duty trucks would be compliant with truck Fuel Economy Standards: California Phase II GHG Standards and would transition to ZEV by 2045. Infrastructure for the proposed project would be required to support this transition to ZEV; as such, MM GHG-2 and GHG-3 are required to demonstrate consistency with this measure. The proposed project would implement MM GHG-2, which would require the project to include infrastructure for electric vehicle charging stations. MM GHG-3 would limit emissions from Transport Refrigeration Units (TRUs) entering the project site if cold storage uses are contemplated in the future. The project does not currently propose cold storage use.
Decarbonize buildings. All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030.	Consistent. The proposed project is consistent with the AB 197 commercial timeline. CALGreen measures for 2022 require rooftop solar photovoltaic system with battery storage for warehouses and heat pumps for office space in warehouses consistent with decarbonization strategies.
Low Carbon Fuels for Transportation. Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	Consistent. Off-road construction equipment would utilize renewable diesel in compliance with the In-Use Off-Road rule. On-road diesel trucks would also utilize these fuels consistent with the LCFS.
Low Carbon Fuels for Fuels for Buildings and Industry. In 2030s renewable natural gas (RNG) blended in pipeline, ramping up to 2040. Dedicated hydrogen pipelines constructed to serve certain industrial clusters.	Consistent. Natural gas utilized by the proposed project would contain this RNG blend as implemented by the Scoping Plan and the energy providers.
Coordinate supply of liquid fossil fuels with declining CA fuel demand. Phase-out oil and gas extraction operations by 2045. Carbon Capture and	Not applicable. The proposed project is not related to the petroleum industry.

⁵² Urban Crossroads. 2023. Lilac and Santa Ana Warehouse Traffic Analysis. April 2023.

Scoping Plan Measure	Project Consistency
Sequestration (CCS) on majority of petroleum refining operations by 2030. Interim goals are to reduce petroleum production reduced in line with its demand.	
Generate clean electricity. Electric sector GHG target of 38 MMTCO2e in 2030 and 31 MMTCO2e7 in 2045. This GHG target is determined to meet the loads associated with the scenario and corresponds to meeting the 2021 SB 100 Joint Agency Report's 100 percent of retail sales with eligible renewable and zero-carbon resources definition.	Not applicable . The proposed project would benefit indirectly from these goals; however, there are no actions related to the project itself.
Decarbonize industrial energy supply. Electrification goals by industry sector specific to Food Industry, Agriculture, and Chemical and Allied Products and Pulp and Paper Industry for milestone years 2030 and 2045. Other Industrial Manufacturing: 0 percent energy electrified by 2030 and 50 percent by 2045. Construction Equipment: 25 percent energy demand electrified by 2030 and 75 percent by 2045. Retire all combined heat and power facilities by 2040.	Consistent. Construction equipment used for the proposed project would comply with ARB off-road regulations meeting milestones for electrification as required by regulations as promulgated. Starting in 2024, amendments to the off-road In-Use Diesel Rule require use of renewable diesel consistent with the 2022 Scoping Plan and implementing the LCFS. Other portions of this measure are not applicable to the proposed project.
 Reduce non-combustion emissions. This involves two strategies targeting methane and HFCs. Increase capture of methane and from landfill and dairy digester and from the oil and gas infrastructure components. Introduction of Low GWP refrigerants introduced as building electrification increases mitigating HFC emissions. 	Consistent. The proposed project would not include cold storage; however, refrigerants may be used for space cooling. The proposed project would use low GWP refrigerants consistent with current California Significant New Alternatives Policy (SNAP) regulations.
Compensate for remaining emissions. This measure uses Carbon Dioxide Removal (CDR) to compensate for remaining emissions.	Not applicable. This measure relates to remaining emissions and is not applicable at the individual project level.
Source: California Air Resources Board (ARR) 2022 Scoping	Plan for Achieving Carbon Neutrality. November.

As evaluated in Table 18, the proposed project would comply with all regulations adopted to further the Scoping Plan to the extent required by law and to the extent that they are applicable to the project. MM GHG-2 and MM GHG-3 are required to ensure that the proposed project would not hinder the future transition to ZEV trucks. As such, the proposed project would not conflict with the applicable Scoping Plan measures with implementation of MM GHG-2 and GHG-3.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

In September 2008, Governor Arnold Schwarzenegger signed the Sustainable Communities and Climate Protection Act of 2008, also known as SB 375, to align regional planning efforts for housing and transportation with the GHG reduction goals outlined by AB 32. SB 375 requires each

Metropolitan Planning Organization (MPO) to adopt a Sustainable Community Strategy (SCS) encouraging compact development that reduces passenger VMT and trips, all for the purpose of meeting ARB-determined regional GHG emissions reduction targets. SCAG is the regional planning agency for Los Angeles Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and is tasked with addressing regional issues related to transportation, the economy, community development, and the environment.

ARB set GHG reduction targets of 8 percent by 2020 and 19 percent by 2035 (compared with 2005 levels) for the SCAG region, effective as of October 2018. Adopted on September 3, 2020, SCAG's latest long-range plan, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS or "Connect SoCal"), serves as the roadmap for fulfilling the region's compliance with these latest GHG reduction targets. To this end, the 2020-2045 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and it acknowledges how this relationship can help the regional make choices that sustain existing resources while expanding efficiency, mobility, and accessibility for all people across the region.

The 2020-2045 RTP/SCS land use pattern continues the trend of focusing new housing and employment growth in the region's High Quality Transit Areas (HQTAs) and aims to enhance and buildout the region's transit network. At the time of the previous 2016-2040 RTP/SCS, HQTAs accounted for just 3 percent of total land in the SCAG region, but they are projected to accommodate 46 percent of the region's future household growth and 55 percent of the region's future employment growth by 2040. HQTAs are a cornerstone of land use planning best practice in the SCAG region, and studies by the California Department of Transportation, the EPA, and the Metropolitan Transportation Commission have found that focusing development in areas served by transit can result in local, regional, and Statewide benefits including reduced air pollution and energy consumption. In addition, HQTAs concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional life cycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability. As a result, HQTAs are vital to the attainment of regional GHG emissions targets: successful implementation of the 2020-2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, which would reduce automobile use andcrucially-associated GHG emissions.

As noted, implementation of the 2020-2045 RTP/SCS is projected to reduce per capita vehicle GHG emissions by 19 percent by 2035, thus enabling the region to fulfill its portion of SB 375 compliance. Implementation is also projected to reduce daily VMT per capita by 5 percent by 2045. Generally, projects are considered consistent with the provisions and policies of applicable land use plans and regulations if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The land use pattern emphasized by the 2020-2045 RTP/SCS involves concentrating new, dense housing and/or job growth in infill locations and HQTAs in an effort to facilitate alternative transportation modes and reduce vehicle trips and VMT. Development of the proposed project would be consistent with this land use pattern and related smart growth policies to increase housing density within HQTAs. By developing a project with job growth opportunities in an infill location, surrounded by similar industrial uses, that is also within a HQTA,

the proposed project would contribute directly to the goals of the 2020-2045 RTP/SCS. The proposed project is appropriately located and supports the 2020-2045 RTP/SCS and its smart growth strategies to efficiently coordinate land usage and transportation in an effort to reduce VMT and related GHG emissions.

Conclusion

Considering the above consistency analysis, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce GHG emissions. Therefore, impacts are considered less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GHG-2 Prior t

Prior to the issuance of a building permit, the City of Rialto Planning Department shall confirm that the project is designed to include the following:

- The buildings' electrical room shall be sufficiently sized to hold additional panels
 that may be needed to supply power for the future installation of electric vehicle
 (EV) truck charging stations on the site.
- Conduit should be installed from the electrical room to tractor trailer parking spaces in a logical location(s) on the site determined by the project applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available and the buildings are being served by trucks with electric-powered engines.

MM GHG-3

Warehouse usage shall be limited to dry storage. If the warehouse is used for cold storage, then prior to the issuance of occupancy permits, the Planning Department shall confirm that tenant lease agreements include contractual language that requires all Transport Refrigeration Units (TRUs) entering the project site be plug-in capable. Electrical hookups shall be provided as part of the tenant improvements for any tenant that requires cold storage. The electrical hookups shall be provided at loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

Level of Significance After Mitigation

Less than significant impact.

4.3 - Energy Impact Analysis

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a project would have a significant impact on Energy, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the proposed project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

A discussion of the proposed project's anticipated energy usage is presented below. Energy use consumed by the proposed project was estimated and includes natural gas, electricity, and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix A.

4.3.1 - CEQA Energy Impact Analysis

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine whether a project would have a significant impact on energy, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the proposed project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Project Energy Consumption

The proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation.

Impact Analysis

Impact ENER-1:

Construction Energy Consumption

According to applicant-provided information, the project construction schedule is anticipated to begin in July 2023 and conclude in June 2024. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. Project construction would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., demolition, grading), and the actual construction of the proposed warehouse. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Construction equipment is estimated to consume a total of 40,618 gallons of diesel fuel over the entire construction duration.

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix A. In total, the proposed project is estimated to generate 1,167,383 VMT and consume a combined 78,062 gallons of gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 7,850 kilowatthours (kWh) during the 14-month construction duration.

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Energy Consumption

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 19.

Table 19: Estimated Annual Project Energy Consumption

Energy Consumption Activity	Annual Consumption
Electricity Consumption	823,626 kWh/year
Natural Gas Consumption	614,950 kBTU/year
Total Fuel Consumption	621,166 gallons of gasoline and diesel
Notes: kBTU = kilo-British Thermal Unit kWh = kilowatt-hour Source: Appendix A	

Operation of the proposed project would consume an estimated 823,626 kWh of electricity and an estimated 614,950 kilo-British Thermal Unit (kBTU) of natural gas on an annual basis. The proposed project's building would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.

Project-related vehicle trips would consume an estimated 621,166 gallons of gasoline and diesel annually. Vehicles utilized during project operation would be subject to the applicable State vehicle fuel efficiency standards, which would incrementally improve with each year of project operation. In addition, as the operation of vehicles and consumption of transportation fuels is driven by the cost of business operation, there exists the incentive to reduce overall fuel consumption where feasible to reduce operating costs.

Appendix F of the CEQA Guidelines and the Appellate Court decision in League to Save Lake Tahoe Mountain etc. v. County of Placer (2022) 75 Cal.App.5th 63, 164-168, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Decreasing Overall Per Capita Energy Consumption

The Traffic Analysis by Urban Crossroads determined that the proposed project's VMT per employee would be below the City's impact thresholds and therefore less than significant.⁵³

Decreasing Reliance on Fossil Fuels

The proposed project would be designed and constructed in accordance with the California Building Code energy efficiency standards. For example, the proposed project would install low-flow plumbing fixtures and high-efficiency light that are compliant with the California Building Code. California Building Code energy efficiency standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. Compliance with the California Building Code would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. As a result, the increase in energy conservation and efficiency would reduce the amount of potentially fossil fuel-sourced electricity consumption, and thereby reducing project reliance on fossil fuels.

Project-related vehicle trips would consume 621,166 gallons of fuel throughout the life of the proposed project due to vehicles traveling to and from the project site. This analysis evaluated operational fuel consumption based on the proposed project's operational assumptions. In addition,

⁵³ Urban Crossroads. 2023. Lilac and Santa Ana Warehouse Traffic Analysis. April 2023.

the proposed project tenant would comply with heavy-duty truck idling limitations as trucks would unload and load goods to avoid fuel waste. Fuel consumption associated with operations of the proposed project would be expected to decrease over time as State programs, such as the ARB's Advanced Clean Trucks Regulation, are implemented and scaled. As noted earlier, this regulation mandates an increasing sales percentage of zero-emissions trucks in California from 2024 to 2035. Other regulations would similarly reduce fuel consumption of the proposed project's trucks and other vehicles. Further, it is worth noting that the project site is in an industrialized area with convenient access to I-10, a rail yard, and a multitude of other warehousing facilities. These factors would likely serve to reduce VMT from the proposed project's truck trips. The project site is also located in a HQTA, meaning that employees would have the opportunity to utilize high quality transit systems for commuting. Thus, the location of the proposed project would help minimize fossil fuel reliance with respect to transportation fuel consumption.

Increasing Reliance on Renewable Energy Sources

The proposed project would be considered to conflict with this criterion if it did not take steps to increase the reliance on renewable energy sources. The proposed project would be required to comply with the applicable EV charging infrastructure standards for the development type, such as pre-wiring to facilitate future installation of EV charging stations. As a result, the proposed project would be incrementally increasing overall reliance on renewable energy sources by including on-site renewable energy generation technologies and incorporating EV charging infrastructure to facilitate the future use of EVs.

Conclusion

As energy consumption resulting from construction and operation of the proposed project would not be considered wasteful, inefficient, or unnecessary, this impact is less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

Energy Plan Consistency

Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Impact Analysis

The proposed project would be served with natural gas provided by Southern California Gas (SoCalGas). SoCalGas has set a voluntary goal to reduce their own electricity usage. Their energy conservation program seeks to (1) reduce GHG emissions, (2) advance new technologies in energy efficiency and emerging, renewable energy, and (3) lower estimated electricity consumption at company facilities through comprehensive energy efficiency retrofits and incorporation of energy-

efficient measures into new construction.⁵⁴ Therefore, the proposed project would be served by a gas company that strives for increased use of renewable energy sources and energy conservation.

The proposed project would be served with electricity provided by Southern California Edison (SCE), which was required to meet California's RPS standards of 33 percent by 2020. SCE's 2020 power mix included 30.9 percent eligible renewable (biomass and waste, geothermal, eligible hydroelectric, solar, and wind), 3.3 percent large hydroelectric, 15.2 percent natural gas, 8.4 percent nuclear and 42.0 percent unspecified sources of power. ⁵⁵ SCE also offers the SCE Green Rate 50 Percent option, which includes 65.4 percent eligible renewable (geothermal, solar, and wind), 1.6 percent large hydroelectric, 7.6 percent natural gas, 4.2 percent nuclear and 21.0 percent unspecified sources of power, and the SCE Green Rate 100 Percent option, which includes 100 percent eligible renewable (solar). SCE would be required to meet California's RPS of 60 percent by 2030 and carbon-free electricity by 2045.

The proposed project would be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner.

In addition, the proposed project would be consistent with the applicable GHG and air pollutionreducing policies from the City's General Plan, which include various energy efficiency and energy conservation policies. Many of the City's policies therein are specific to the City's actions or programs for the City to implement; however, the proposed project is consistent with or would not preclude or conflict with any applicable policy of the City's General Plan intended to improve energy efficiency or energy conservation.

Conclusion

As energy consumption resulting from construction and operation of the proposed project would not constitute a conflict with or obstruct a State or local plan for renewable energy or energy efficiency, this impact is less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

90 FirstCarbon Solutions Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/5780/57800001/AQ-GHG-Energy/57800001 Lilac and Santa Ana Warehouse AQ-GHG-Energy Report.d

Southern California Gas Company (SoCalGas). 2021. Sustainability at SoCalGas. Website: https://www.socalgas.com/ko/taxonomy/term/731 Accessed October 12, 2022.

⁵⁵ California Energy Commission (CEC). 2021. 2020 Power Content Label. Website: https://www.energy.ca.gov/programs-andtopics/programs/power-source-disclosure/power-content-label/annual-power-content-1. Accessed October 11, 2022.

Seefried Industrial Properties, Inc.–Lilac Avenue and Santa Ana Avenue Wareh Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report	ouse Project
	Appendix A:
Suppo	orting Calculations and Notes



Lilac and Santa Ana Warehouse Project CalEEMod Notes

Note A

Construction schedule information was provided by the applicant and indicated that construction would begin no earlier than summer 2023 and last approximately one year. Based on this schedule, operations would occur no earlier than 2024.

Note B

Land uses were calculated as follows:

- <u>Unrefrigerated Warehouse-No Rail:</u> The site plan dated 7/22/22 indicates that the
 proposed warehouse building would include 294,000 sf of dry storage warehouse
 space. The applicant indicated that there would be no cold storage.
- <u>General Office Building:</u> The site plan dated 7/22/22 indicates that the proposed warehouse building would include 7,000 sf of office space.
- <u>City Park:</u> The site plan dated 7/22/22 indicates that the proposed project would provide 74,000 square feet of landscaping.
- <u>Parking Lot:</u> The remaining parking area was estimated by deducting the area of the aforementioned land uses from the proposed project's 13.67-acre (595,616 sf) total area.

Note C

The construction schedule was estimated based on CalEEMod default assumptions, as well as information from the applicant. The applicant indicated that construction would last approximately one year.

Note D

The applicant indicated that grading would require 36,500 cubic yards of imported material. Grading assumes a maximum 3-acre daily disturbed acreage, consistent with SCAQMD guidance. This is based on the proposed project's anticipated use of two scrapers, one grader, and one rubber tired dozer during the grading phase. According to the referenced guidance, scrapers may grade approximately one acre each per day. Graders may grade approximately 0.5 acres per day, and rubber tired dozers may grade approximately 0.5 acres per day, as well. 1 acre + 1 acre + 0.5 acre + 0.5 acre = 3 acres graded per day.

Note E

The proposed project site contains approximately 15,000 sf of existing structures that would be demolished, which corresponds with an estimated demolition volume of 2,435 cubic yards. USEPA volume-to-weight conversion factors for construction and demolition bulk debris assume a ratio of 484 lbs per cubic yard. 2 2,435 cubic yards x 484 lbs = 1,178,540 lbs = 589 tons.

The proposed project site also contains approximately 410,100 sf (9.41 acres) of paved surfaces that would be demolished, which corresponds with an estimated demolition volume of 7,593 cubic yards. USEPA volume-to-weight conversion factors for asphalt

SCAQMD. Undated. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf. Accessed November 9, 2022.

USEPA, Office of Resource Conservation and Recovery. 2016. Volume-to-Weight Conversion Factors.

paving assume a ratio of 773 lbs per cubic yard. 3 7,593 cubic yards x 773 lbs = 5,869,389 lbs = 2,935 tons.

589 tons of demolished structures + 2,935 tons of demolished pavement = 3,524 tons of demolished materials.

Note F A regional landfill for demolished debris and a source of imported material have not been identified for the proposed project. Therefore, the analysis conservatively assumes a demolition and grading haul trip length of 40 miles to account for a reasonable range of potential regional landfills and potential sources of imported material.

Note G The applicant indicated that low-VOC coatings containing a VOC content of 50 g/L or less would be utilized.

Note H The proposed project's trip rate was estimated based on the size of the trip-generating uses (301,000 sf) and the proposed project's projected daily trip volume (520 total trips), as estimated by Urban Crossroads.⁴ 520 total trips / 301,000 sf = 1.73 trips per 1,000 sf.

Note I A separate CalEEMod analysis has been performed to estimate emissions that would be associated with the proposed project's estimated 210 truck trips per day.

Note J The applicant indicated that low-VOC coatings containing a VOC content of 50g/L or less would be utilized.

Note K The applicant indicated that up to 10 powered industrial trucks (i.e., forklifts and pallet jacks) would be anticipated for the proposed project's operations.

Note L The applicant indicated that an approximately 350 hp firepump would be utilized for the proposed project. The analysis assumes that this firepump may be tested once a month for 30 minutes.

Note M The analysis assumes an 80 percent SCAQMD Rule 403 control efficiency for trackout PM reduction, based on use of trackout control devices.⁵

Note N The applicant indicated that low-VOC coatings containing a VOC content of 50g/L or less would be utilized.

Note O This model is to calculate operational emissions associated with the proposed project's truck trip generation only.

The proposed project's truck trip rate was estimated based on the size of the truck tripgenerating uses (294,000 sf of unrefrigerated warehouse) and the proposed project's projected daily truck trip volume (210 total truck trips), as estimated by Urban Crossroads.⁶ 210 total truck trips / 294,000 sf = 0.714 trips per 1,000 sf. Trip lengths

Note P

USEPA, Office of Resource Conservation and Recovery. 2016. Volume-to-Weight Conversion Factors.

Urban Crossroads. September 2022. Santa Ana & Lilac Warehouse Traffic Analysis.

⁵ SCAQMD. 2007. Fugitive Dust Mitigation Measure Tables.

⁶ Urban Crossroads. September 2022. Santa Ana & Lilac Warehouse Traffic Analysis.

were modified from default values to assume that half the proposed project's trucks trips may be to or from the Port of Los Angeles and/or Port of Long Beach, which are approximately 71 miles from the project site.

- Note Q To be conservative, 100% of truck trips were assumed to be HHD diesel heavy-duty trucks.
- Note R This model is to calculate construction emissions associated with the proposed project's 1.5 acres of frontage improvements only.
- Note S The applicant indicated that approximately 1.5 acres of frontage improvements would be implemented along Lilac Avenue and Santa Ana Avenue. The "Parking Lot" land use subtype has been chosen to best reflect the types of roadway, paving, and curbing improvements that would be conducted.
- Note T It is conservatively assumed that frontage improvements would require both "building construction" and "paving" activities and equipment, pursuant to CalEEMod's default assumptions for these phases.
- Note U It is conservatively assumed that frontage improvements would require both "building construction" and "paving" equipment, pursuant to CalEEMod's default assumptions for these phases. Frontage improvements would not require an additional crane.

Construction Equipment Fuel Calculation

Source: AQ/GHG Appendix, CalEEMod Output Lilac and Santa Ana Warehouse

Construction Schedule

				Num Days	i
CalEEMod Run	Phase Type	Start Date	End Date	Week	Num Days
Main Site Construction					
Demolition	Demolition	7/3/2023	7/28/2023	5	20
Grading	Grading	7/29/2023	9/8/2023	5	30
Building Construction	Building Construction	9/9/2023	6/28/2024	5	210
Paving	Paving	6/3/2024	6/28/2024	5	20
Architectural Coatings	Architectural Coatings	5/6/2024	6/28/2024	5	40
Frontage BC	Building Construction	6/3/2024	6/28/2024	5	20
Frontage Paving	Paving	6/3/2024	6/28/2024	5	20

Construction Equipment

				Horse	Load			Diesel Fuel
Phase Name	Offroad Equipment Type	Amount	Usage Hours	Power	Factor	Number of Days	HP Hours	Usage
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9460.8	473
Demolition	Excavators	3	8	158	0.38	20	28819.2	1,440.96
Demolition	Rubber Tired Dozers	2	8	247	0.4	20	31616	1,580.80
Grading	Excavators	2	8	158	0.38	30	28819.2	1,440.96
Grading	Rubber Tired Dozers	1	8	247	0.4	30	23712	1,186
Grading	Scrapers	2	8	367	0.48	30	84556.8	4,227.84
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	30	17227.2	861.36
Building Construction	Cranes	1	7	231	0.29	210	98475.3	4,924
Building Construction	Forklifts	3	8	89	0.2	210	89712	4,486
Building Construction	Generator Sets	1	8	84	0.74	210	104428.8	5,221
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	210	158274.9	7,913.75
Building Construction	Welders	1	8	46	0.45	210	34776	1,739
Architectural Coating	Air Compressors	1	6	78	0.48	40	8985.6	449
Paving	Pavers	2	8	130	0.42	20	17472	874
Paving	Paving Equipment	2	8	132	0.36	20	15206.4	760
Paving	Rollers	2	8	80	0.38	20	9728	486
Frontage BC	Forklifts	1	6	89	0.2	20	2136	106.80
Frontage BC	Generator Sets	1	8	84	0.74	20	9945.6	497.28
Frontage BC	Tractors/Loaders/Backhoes	1	6	97	0.37	20	4306.8	215
Frontage BC	Welders	3	8	46	0.45	20	9936	496.80
Frontage Paving	Cement and Mortar Mixers	1	6	9	0.56	20	604.8	30.24
Frontage Paving	Pavers	1	6	130	0.42	20	6552	328
Frontage Paving	Paving Equipment	1	8	132	0.36	20	7603.2	380.16
Frontage Paving	Tractors/Loaders/Backhoes	1	8	97	0.37			
Frontage Paving	Rollers	1	7	80	0.38	20	4256	213

Project Operational Fuel Calculation

California Air Resource Board (ARB). 2021. EMFAC2017 Web Database. Website: https://arb.ca.gov/emfac/2017/. Accessed November 3, 2021.

EMFAC2017 (v1.0.2) Emissions Inventory

VMT = Vehicle Miles Traveled FE = Fuel Economy

Region Type: County Region: San Bernardino

Region: San Bernardino Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Given Calculations

Fuel

VehClass MdlYr Speed Fuel Population VMT Consumption FE VMT*FE

HHDT Aggregated CAS 9.320703905 270.7766159 0.100013373 2.762423271 1420.36200

HHDT Aggregated Aggregated GAS 8.239702895 379.7766158 0.100912273 3.763433371 1429.26399 HHDT TRUE DSL 27173.91352 4430763.767 725.9466026 6.103429304 TRUE HHDT Aggregated Aggregated 27042853.42 HHDT

Sum of VMT*FE 27044282.68

Total VMT 4431143.544

Weighted Average FE (miles/gallon) 6.1032

Total VMT

Lilac and Santa Ana Project

Annual VMT Fuel (miles) Consumption

Total VMT 3,194,793 **523,459 gallons per year**

12.50408

Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/.

Source: EMFAC2021 (v1.0.2) Emissions Inventory

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Region Type: County Region: San Bernardino

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

							Calcul	ations
						Consumption		
					VMT	(1000	FE	
VehClass	MdlYr	Speed	Fuel	Population	(mi/day)	gallons/day)	(mi/gallon)	VMT*FE
HHDT	Aggregated	Aggregated	GAS	10.84594146	421.760427	0.117638541	3.58522322	1512.10527
HHDT	Aggregated	Aggregated	DSL	26225.50302	4341337.17	720.9637943	6.02157446	26141685
LDA	Aggregated	Aggregated	GAS	773664.0019	33073440.1	1140.883797	28.9893153	958776381
LDA	Aggregated	Aggregated	DSL	2221.377014	77366.1614	1.847726849	41.8709949	3239398.15
LDT1	Aggregated	Aggregated	GAS	73981.30063	2503906.5	104.6712544	23.921625	59897512.4
LDT1	Aggregated	Aggregated	DSL	29.71832479	424.15767	0.01780751	23.8190325	10103.0253
LDT2	Aggregated	Aggregated	GAS	323145.0561	13160212.6	561.8657302	23.4223444	308243032
LDT2	Aggregated	Aggregated	DSL	896.7674867	39572.0304	1.237774667	31.9703024	1265129.78
LHDT1	Aggregated	Aggregated	GAS	30742.28663	1119163.83	86.11879912	12.995581	14544184.1
LHDT1	Aggregated	Aggregated	DSL	22607.19394	848721.584	41.58863815	20.4075349	17320315.3
LHDT2	Aggregated	Aggregated	GAS	4697.68606	167949.36	14.38919799	11.6719055	1960289.06
LHDT2	Aggregated	Aggregated	DSL	9499.536898	366079.775	21.57177622	16.9703121	6212488.04
MHDT	Aggregated	Aggregated	GAS	2420.649225	143249.007	27.97582873	5.12045626	733500.277
MHDT	Aggregated	Aggregated	DSL	17266.34205	797273.164	88.79983069	8.97831851	7158172.41

Worker

Sum of VMT*FE (Column BI) 1331431556 Total VMT 48854921.5 Weighted Average FE 27.2527621

Vendor Sum of VMT*FE (Column BI) 74072146.4 Total VMT 7784195.65

Weighted Average FE 9.51570975

Sum of VMT*FE (Column BI) 26143197.1 Total VMT 4341758.93

Weighted Average FE 6.02133779

Construction Parameters
Source: AQ/GHG Appendix, CalEEMod Output Lilac and Santa Ana Warehouse Date: 11/4/2022 9:47 AM

Construction Schedule

				Num Days	Days		
Phase Name	Phase Type	Start Date	End Date	Week	Num Days		
Demolition	Demolition	7/3/2023	7/28/2023	5	20		
Grading	Grading	7/29/2023	9/8/2023	5	30		
Building Construction	Building Construction	9/9/2023	6/28/2024	5	210		
Paving	Paving	6/3/2024	6/28/2024	5	20		
Architectural Coatings	Architectural Coatings	5/6/2024	6/28/2024	5	40		
Frontage BC	Building Construction	6/3/2024	6/28/2024	5	20		
Frontage Paving	Paving	6/3/2024	6/28/2024	5	20		

Construction Trips and VMT

		Trips per Day		Construct	ion Trip Lengt	h in Miles		Т	rips per Phas	ie	١	/MT per Pha	se	Fuel Cor	nsumption (g	allons)
	Worker Trip	Vandar Trin	Hauling Trip	Morker Trip	Vandar Trin	Hauling Trip	Number of	Morkey Trip	Vandor Trin	Hauling Trip	Worker	Vendor	Hauling		Vendor	Hauling
Phase Name	Number	Number	Number	Length	Length	Length	Days per Phase	Number	Number	Number	Trips	Trips	Trips	Worker Trips		Trips
Demolition	15	0	348	14.7	6.9	40	20	300	0	348	4,410	0	13,920	161.82	0.00	2,311.78
Grading	20	0	4562	14.7	6.9	40	30	600	0	4,562	8,820	0	182,480	323.64	0.00	30,305.56
Building Construction	249	98	0	14.7	6.9	20	210	52,290	20,580	0	768,663	142,002	0	28,204.96	14,922.90	0.00
Paving	15	0	0	14.7	6.9	20	20	300	0	0	4,410	0	0	161.82	0.00	0.00
Architectural Coatings	50	0	0	14.7	6.9	20	40	2,000	0	0	29,400	0	0	1,078.79	0.00	0.00
Frontage BC	27	11	0	14.7	6.9	20	20	540	220	0	7,938	1,518	0	291.27	159.53	0.00
Frontage Paving	13	0	0	14.7	6.9	20	20	260	0	0	3,822	0	0	140.24	0.00	0.00

Total Project Construction VMT (miles)

1,167,383

Total Project Fuel Consumption (gallons)

78,062

Project Operational Fuel Calculation

California Air Resource Board (ARB). 2021. EMFAC2017 Web Database. Website: https://arb.ca.gov/emfac/2017/. Accessed November 3, 2021.

EMFAC2017 (v1.0.2) Emissions Inventory Region Type: County

VMT = Vehicle Miles Traveled FE = Fuel Economy

Region: San Bernardino Calendar Year: 2024 Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Given Calculations Fuel VehClass MdlYr Population VMT FE VMT*FE Speed Fuel Consumption 8.239702895 379.7766158 3.763433371 1429.26399 HHDT Aggregated Aggregated GAS 0.100912273 HHDT TRUE HHDT DSL 27173.91352 4430763.767 725.9466026 6.103429304 27042853.42 HHDT TRUE Aggregated Aggregated LDA Aggregated Aggregated GAS 768865.9289 33024787.61 1118.203358 29.53379399 975347273.9 LDA TRUE IDA Aggregated Aggregated DSL 2082.571633 71739.62549 1.702184627 42.14561944 3023510.955 LDA TRUE LDT1 Aggregated Aggregated GAS 71959 12939 2460565 057 101 0654284 24.34625861 59905553.22 LDT1 TRUE LDT1 Aggregated Aggregated DSL 26.71801826 374.0512762 0.015712852 23.8054343 8904.453081 LDT1 TRUE LDT2 Aggregated Aggregated GAS 330380.251 13590073.66 565.3308258 24.03915201 326693846.5 LDT2 TRUE LDT2 Aggregated Aggregated DSL 956.1891951 42432.4165 1.300247891 32.63409754 1384743.619 LDT2 TRUE LHDT1 Aggregated Aggregated GAS 30244.61538 1118103.334 83.75173077 13.35021168 14926916.19 LHDT1 TRUE 20.48891016 17314738.1 I HDT1 Aggregated Aggregated DSL 22449.99827 845078.5311 41 24565555 LHDT1 TRUE LHDT2 165460.8677 11.89846716 1968730.701 LHDT2 TRUE Aggregated GAS 4610.822761 13.90606583 Aggregated LHDT2 Aggregated DSL 9557.327727 367558.7935 21.52197298 17.07830383 6277280.75 LHDT2 TRUE Aggregated MCY 38913.8022 228527.3492 41.45648246 9473940.044 Aggregated Aggregated GAS 5.512463569 MCY TRUE MDV Aggregated Aggregated GAS 252133.831 9933878.293 511.440747 19.42332196 192948916.4 MDV TRUE DSL 3625.76391 23.47976849 3443691 953 MDV MDV Aggregated Aggregated 146666.3504 6.246498998 TRUE 274996.4411 4.829570498 МН Aggregated Aggregated GAS 6493.342159 56940.14431 11.78989816 MH TRUE МН Aggregated Aggregated DSL 2613.294195 23080.51534 2.231535545 10.34288492 238719.1141 МН TRUE MHDT Aggregated Aggregated GAS 2359.268218 142286.4089 27.50202622 5.173670033 736142.9298 MHDT TRUE MHDT DSL 17660.92816 809994.4973 90.20016502 8.979966912 7273723.784 MHDT TRUE Aggregated Aggregated OBUS Aggregated Aggregated GAS 641.8016714 32183.86729 6.350171448 5.068188718 163113.9131 OBUS TRUE 149043.783 OBUS DSL 20190.49213 7.381879654 OBUS TRUE Aggregated Aggregated 282.9496634 2.735142413 SRUS GAS 20109 18832 2 224951171 9.038035793 181747 5638 SRUS TRUE Aggregated 394 0836304 Aggregated SBUS DSL 998.8857158 22402.38831 2.986296516 7.501729382 168056.6546 SBUS TRUE

10518.84527

1.796788281

109.8939315

Sum of VMT*FE 1649009454 Total VMT 67564095.83 Weighted Average FE (miles/gallon) 24.4066

5.854248597

61579.93518

TRUE

Total VMT

UBUS

Lilac and Santa Ana Project

Aggregated

Aggregated

Aggregated

Aggregated

GAS

Annual VMT Fuel (miles) Consumption Total VMT 2,384,692 97,707 gallons per year 3194793 523459.4884

9.333432



Appendix B
CalEEMod Modeling Results
Careering results



Appendix B: CalEEMod Modeling Results

Table of Contents

Project Construction and Operations—Annual	1
Project Construction and Operations—Summer	37
Project Construction and Operations—Winter	65
Off-site Improvements Construction—Annual	93
Off-site Improvements Construction—Summer	112
Off-site Improvements Construction—Winter	128
Operational Truck Trips—Annual	144
Operational Truck Trips—Summer	166
Operational Truck Trips—Winter	181
Localized On-site Operational Emissions—Summer	196
Localized On-site Operational Emissions—Winter	213
Localized Operational Truck Trips—Summer	230
Localized Operational Truck Trips—Winter	245

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

5780.0001 Lilac and Santa Ana Warehouse Project

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 32 **Climate Zone** 10 **Operational Year** 2024

Utility Company Southern California Edison

CO2 Intensity 390.98 **CH4 Intensity** 0.033 **N2O Intensity** 0.004 (lb/MWhr) (lb/MWhr) (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note B

Construction Phase - See Note C

Trips and VMT - See Note F

Demolition - See Note E

Grading - See Note D

Architectural Coating - See Note G

Vehicle Trips - See Note H

Area Coating - See Note J

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

Construction Off-road Equipment Mitigation - See Note M

Area Mitigation - See Note N

Operational Off-Road Equipment - See Note K

Fleet Mix - See Note I

Stationary Sources - Emergency Generators and Fire Pumps - See Note L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	300.00	210.00
tblGrading	MaterialImported	0.00	36,500.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripNumber	4,563.00	4,562.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

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

tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.73
tblVehicleTrips	ST_TR	1.74	1.73
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	1.73
tblVehicleTrips	SU_TR	1.74	1.73
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	1.73
tblVehicleTrips	WD_TR	1.74	1.73

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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		
2023	0.1844	1.9984	1.7819	6.7400e- 003	0.4012	0.0666	0.4678	0.1215	0.0622	0.1837	0.0000	630.0910	630.0910	0.0736	0.0546	648.1892
2024	0.8918	1.2705	1.8504	4.7200e- 003	0.2303	0.0483	0.2786	0.0621	0.0455	0.1075	0.0000	427.6819	427.6819	0.0487	0.0199	434.8332
Maximum	0.8918	1.9984	1.8504	6.7400e- 003	0.4012	0.0666	0.4678	0.1215	0.0622	0.1837	0.0000	630.0910	630.0910	0.0736	0.0546	648.1892

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		
2023	0.1844	1.9984	1.7819	6.7400e- 003	0.1488	0.0666	0.2154	0.0491	0.0622	0.1113	0.0000	630.0907	630.0907	0.0736	0.0546	648.1890
2024	0.8918	1.2705	1.8504	4.7200e- 003	0.0757	0.0483	0.1240	0.0241	0.0455	0.0696	0.0000	427.6817	427.6817	0.0487	0.0199	434.8330
Maximum	0.8918	1.9984	1.8504	6.7400e- 003	0.1488	0.0666	0.2154	0.0491	0.0622	0.1113	0.0000	630.0907	630.0907	0.0736	0.0546	648.1890

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	64.45	0.00	54.52	60.13	0.00	37.90	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	7-3-2023	10-2-2023	1.4671	1.4671
2	10-3-2023	1-2-2024	0.6974	0.6974
3	1-3-2024	4-2-2024	0.6532	0.6532
4	4-3-2024	7-2-2024	1.4435	1.4435
		Highest	1.4671	1.4671

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

2.2 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	Γ/yr					
Area	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Energy	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	178.8824	178.8824	0.0130	2.1000e- 003	179.8310
Mobile	0.3166	0.5553	3.6354	8.5300e- 003	0.8992	6.7500e- 003	0.9059	0.2402	6.3200e- 003	0.2465	0.0000	789.3748	789.3748	0.0417	0.0382	801.8096
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	1.7200e- 003	4.8200e- 003	4.3900e- 003	1.0000e- 005		2.5000e- 004	2.5000e- 004	 	2.5000e- 004	2.5000e- 004	0.0000	0.7997	0.7997	1.1000e- 004	0.0000	0.8025
Waste		,	,			0.0000	0.0000	 	0.0000	0.0000	57.4505	0.0000	57.4505	3.3952	0.0000	142.3312
Water		y : : : :	1	,		0.0000	0.0000		0.0000	0.0000	21.9640	165.3642	187.3282	2.2699	0.0550	260.4527
Total	1.4959	0.5903	3.6690	8.7200e- 003	0.8992	9.3000e- 003	0.9085	0.2402	8.8700e- 003	0.2491	79.4145	1,134.428 7	1,213.843 2	5.7199	0.0953	1,385.235 1

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

2.2 Overall Operational

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					ton	ıs/yr				МТ	Γ/yr					
Area	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Energy	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	178.8824	178.8824	0.0130	2.1000e- 003	179.8310
Mobile	0.3166	0.5553	3.6354	8.5300e- 003	0.8992	6.7500e- 003	0.9059	0.2402	6.3200e- 003	0.2465	0.0000	789.3748	789.3748	0.0417	0.0382	801.8096
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	1.7200e- 003	4.8200e- 003	4.3900e- 003	1.0000e- 005		2.5000e- 004	2.5000e- 004	,	2.5000e- 004	2.5000e- 004	0.0000	0.7997	0.7997	1.1000e- 004	0.0000	0.8025
Waste	61 01 01 01 01	,	,			0.0000	0.0000	,	0.0000	0.0000	57.4505	0.0000	57.4505	3.3952	0.0000	142.3312
Water	61 61 61 61 61	,	1 1 1			0.0000	0.0000		0.0000	0.0000	21.9640	165.3642	187.3282	2.2699	0.0550	260.4527
Total	1.4959	0.5903	3.6690	8.7200e- 003	0.8992	9.3000e- 003	0.9085	0.2402	8.8700e- 003	0.2491	79.4145	1,134.428 7	1,213.843 2	5.7199	0.0953	1,385.235 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	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

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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/3/2023	7/28/2023	5	20	
2	Grading	Grading	7/29/2023	9/8/2023	5	30	
3	Building Construction	Building Construction	9/9/2023	6/28/2024	5	210	
4	Architectural Coating	Architectural Coating	5/6/2024	6/28/2024	5	40	
5	Paving	Paving	6/3/2024	6/28/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 451,500; Non-Residential Outdoor: 150,500; Striped Parking Area: 13,237 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	; 1;	8.00	46	0.45

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

Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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	348.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,562.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	98.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.2 Demolition - 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		
Fugitive Dust					0.0377	0.0000	0.0377	5.7100e- 003	0.0000	5.7100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e- 004		9.9800e- 003	9.9800e- 003		9.2800e- 003	9.2800e- 003	0.0000	33.9921	33.9921	9.5200e- 003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e- 004	0.0377	9.9800e- 003	0.0477	5.7100e- 003	9.2800e- 003	0.0150	0.0000	33.9921	33.9921	9.5200e- 003	0.0000	34.2301

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	5.9000e- 004	0.0368	8.4000e- 003	1.9000e- 004	5.9900e- 003	4.0000e- 004	6.3900e- 003	1.6400e- 003	3.8000e- 004	2.0300e- 003	0.0000	18.7971	18.7971	8.1000e- 004	2.9800e- 003	19.7054
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	5.2000e- 004	3.9000e- 004	4.8700e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.2686	1.2686	3.0000e- 005	3.0000e- 005	1.2799
Total	1.1100e- 003	0.0372	0.0133	2.0000e- 004	7.6300e- 003	4.1000e- 004	8.0400e- 003	2.0800e- 003	3.9000e- 004	2.4700e- 003	0.0000	20.0658	20.0658	8.4000e- 004	3.0100e- 003	20.9853

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.2 **Demolition - 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					ton	s/yr							МТ	/уг		
Fugitive Dust					0.0147	0.0000	0.0147	2.2300e- 003	0.0000	2.2300e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e- 004		9.9800e- 003	9.9800e- 003		9.2800e- 003	9.2800e- 003	0.0000	33.9920	33.9920	9.5200e- 003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e- 004	0.0147	9.9800e- 003	0.0247	2.2300e- 003	9.2800e- 003	0.0115	0.0000	33.9920	33.9920	9.5200e- 003	0.0000	34.2300

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	5.9000e- 004	0.0368	8.4000e- 003	1.9000e- 004	2.3900e- 003	4.0000e- 004	2.7900e- 003	7.6000e- 004	3.8000e- 004	1.1400e- 003	0.0000	18.7971	18.7971	8.1000e- 004	2.9800e- 003	19.7054
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	5.2000e- 004	3.9000e- 004	4.8700e- 003	1.0000e- 005	5.0000e- 004	1.0000e- 005	5.1000e- 004	1.6000e- 004	1.0000e- 005	1.6000e- 004	0.0000	1.2686	1.2686	3.0000e- 005	3.0000e- 005	1.2799
Total	1.1100e- 003	0.0372	0.0133	2.0000e- 004	2.8900e- 003	4.1000e- 004	3.3000e- 003	9.2000e- 004	3.9000e- 004	1.3000e- 003	0.0000	20.0658	20.0658	8.4000e- 004	3.0100e- 003	20.9853

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.3 Grading - 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		
Fugitive Dust					0.1401	0.0000	0.1401	0.0551	0.0000	0.0551	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e- 004	 	0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e- 004	0.1401	0.0214	0.1615	0.0551	0.0197	0.0748	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

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	7.6900e- 003	0.4820	0.1102	2.4900e- 003	0.0785	5.2500e- 003	0.0838	0.0216	5.0300e- 003	0.0266	0.0000	246.4152	246.4152	0.0106	0.0391	258.3219
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	1.0400e- 003	7.8000e- 004	9.7400e- 003	3.0000e- 005	3.2900e- 003	2.0000e- 005	3.3100e- 003	8.7000e- 004	2.0000e- 005	8.9000e- 004	0.0000	2.5373	2.5373	7.0000e- 005	7.0000e- 005	2.5597
Total	8.7300e- 003	0.4828	0.1199	2.5200e- 003	0.0818	5.2700e- 003	0.0871	0.0224	5.0500e- 003	0.0275	0.0000	248.9525	248.9525	0.0107	0.0391	260.8816

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.3 Grading - 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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0547	0.0000	0.0547	0.0215	0.0000	0.0215	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e- 004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e- 004	0.0547	0.0214	0.0760	0.0215	0.0197	0.0412	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

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	7.6900e- 003	0.4820	0.1102	2.4900e- 003	0.0313	5.2500e- 003	0.0366	9.9800e- 003	5.0300e- 003	0.0150	0.0000	246.4152	246.4152	0.0106	0.0391	258.3219
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	1.0400e- 003	7.8000e- 004	9.7400e- 003	3.0000e- 005	1.0100e- 003	2.0000e- 005	1.0200e- 003	3.1000e- 004	2.0000e- 005	3.3000e- 004	0.0000	2.5373	2.5373	7.0000e- 005	7.0000e- 005	2.5597
Total	8.7300e- 003	0.4828	0.1199	2.5200e- 003	0.0323	5.2700e- 003	0.0376	0.0103	5.0500e- 003	0.0153	0.0000	248.9525	248.9525	0.0107	0.0391	260.8816

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0629	0.5754	0.6498	1.0800e- 003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733
Total	0.0629	0.5754	0.6498	1.0800e- 003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7219	92.7219	0.0221	0.0000	93.2733

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	4.4200e- 003	0.1446	0.0586	7.0000e- 004	0.0247	1.0400e- 003	0.0258	7.1400e- 003	9.9000e- 004	8.1300e- 003	0.0000	68.3189	68.3189	1.7800e- 003	0.0101	71.3721
Worker	0.0347	0.0259	0.3232	9.2000e- 004	0.1092	5.5000e- 004	0.1098	0.0290	5.0000e- 004	0.0295	0.0000	84.2370	84.2370	2.2400e- 003	2.3100e- 003	84.9826
Total	0.0391	0.1705	0.3818	1.6200e- 003	0.1339	1.5900e- 003	0.1355	0.0361	1.4900e- 003	0.0376	0.0000	152.5560	152.5560	4.0200e- 003	0.0124	156.3547

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
J. Trodu	0.0629	0.5754	0.6498	1.0800e- 003		0.0280	0.0280	1 1 1	0.0263	0.0263	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732
Total	0.0629	0.5754	0.6498	1.0800e- 003		0.0280	0.0280		0.0263	0.0263	0.0000	92.7218	92.7218	0.0221	0.0000	93.2732

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	4.4200e- 003	0.1446	0.0586	7.0000e- 004	0.0107	1.0400e- 003	0.0118	3.7000e- 003	9.9000e- 004	4.6900e- 003	0.0000	68.3189	68.3189	1.7800e- 003	0.0101	71.3721
Worker	0.0347	0.0259	0.3232	9.2000e- 004	0.0335	5.5000e- 004	0.0340	0.0104	5.0000e- 004	0.0109	0.0000	84.2370	84.2370	2.2400e- 003	2.3100e- 003	84.9826
Total	0.0391	0.1705	0.3818	1.6200e- 003	0.0442	1.5900e- 003	0.0458	0.0141	1.4900e- 003	0.0156	0.0000	152.5560	152.5560	4.0200e- 003	0.0124	156.3547

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.4 Building Construction - 2024

<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					ton	s/yr							MT	/yr		
Off-Road	0.0957	0.8739	1.0508	1.7500e- 003		0.0399	0.0399		0.0375	0.0375	0.0000	150.7019	150.7019	0.0356	0.0000	151.5928
Total	0.0957	0.8739	1.0508	1.7500e- 003		0.0399	0.0399		0.0375	0.0375	0.0000	150.7019	150.7019	0.0356	0.0000	151.5928

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	7.0200e- 003	0.2371	0.0936	1.1300e- 003	0.0402	1.6600e- 003	0.0418	0.0116	1.5800e- 003	0.0132	0.0000	109.4898	109.4898	2.8000e- 003	0.0162	114.3807
Worker	0.0524	0.0373	0.4888	1.4500e- 003	0.1775	8.5000e- 004	0.1783	0.0471	7.9000e- 004	0.0479	0.0000	132.9132	132.9132	3.3000e- 003	3.4800e- 003	134.0339
Total	0.0594	0.2744	0.5823	2.5800e- 003	0.2176	2.5100e- 003	0.2202	0.0587	2.3700e- 003	0.0611	0.0000	242.4030	242.4030	6.1000e- 003	0.0197	248.4147

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.4 Building Construction - 2024

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		
J	0.0957	0.8738	1.0508	1.7500e- 003		0.0399	0.0399		0.0375	0.0375	0.0000	150.7017	150.7017	0.0356	0.0000	151.5927
Total	0.0957	0.8738	1.0508	1.7500e- 003		0.0399	0.0399		0.0375	0.0375	0.0000	150.7017	150.7017	0.0356	0.0000	151.5927

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	7.0200e- 003	0.2371	0.0936	1.1300e- 003	0.0174	1.6600e- 003	0.0191	6.0100e- 003	1.5800e- 003	7.6000e- 003	0.0000	109.4898	109.4898	2.8000e- 003	0.0162	114.3807
Worker	0.0524	0.0373	0.4888	1.4500e- 003	0.0544	8.5000e- 004	0.0553	0.0169	7.9000e- 004	0.0177	0.0000	132.9132	132.9132	3.3000e- 003	3.4800e- 003	134.0339
Total	0.0594	0.2744	0.5823	2.5800e- 003	0.0718	2.5100e- 003	0.0743	0.0229	2.3700e- 003	0.0253	0.0000	242.4030	242.4030	6.1000e- 003	0.0197	248.4147

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Architectural Coating - 2024 <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					ton	s/yr							MT	/yr		
Archit. Coating	0.7129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e- 003	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137
Total	0.7165	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137

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	/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	3.2400e- 003	2.3000e- 003	0.0302	9.0000e- 005	0.0110	5.0000e- 005	0.0110	2.9100e- 003	5.0000e- 005	2.9600e- 003	0.0000	8.2121	8.2121	2.0000e- 004	2.2000e- 004	8.2814
Total	3.2400e- 003	2.3000e- 003	0.0302	9.0000e- 005	0.0110	5.0000e- 005	0.0110	2.9100e- 003	5.0000e- 005	2.9600e- 003	0.0000	8.2121	8.2121	2.0000e- 004	2.2000e- 004	8.2814

CalEEMod Version: CalEEMod.2020.4.0 Page 19 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.7129					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e- 003	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137
Total	0.7165	0.0244	0.0362	6.0000e- 005		1.2200e- 003	1.2200e- 003		1.2200e- 003	1.2200e- 003	0.0000	5.1065	5.1065	2.9000e- 004	0.0000	5.1137

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	/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	3.2400e- 003	2.3000e- 003	0.0302	9.0000e- 005	3.3600e- 003	5.0000e- 005	3.4100e- 003	1.0500e- 003	5.0000e- 005	1.0900e- 003	0.0000	8.2121	8.2121	2.0000e- 004	2.2000e- 004	8.2814
Total	3.2400e- 003	2.3000e- 003	0.0302	9.0000e- 005	3.3600e- 003	5.0000e- 005	3.4100e- 003	1.0500e- 003	5.0000e- 005	1.0900e- 003	0.0000	8.2121	8.2121	2.0000e- 004	2.2000e- 004	8.2814

CalEEMod Version: CalEEMod.2020.4.0 Page 20 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.6 Paving - 2024
<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					ton	s/yr							MT	/yr		
Off-Road	9.8800e- 003	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885
Paving	6.6300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0165	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1885

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	4.9000e- 004	3.5000e- 004	4.5300e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.2318	1.2318	3.0000e- 005	3.0000e- 005	1.2422
Total	4.9000e- 004	3.5000e- 004	4.5300e- 003	1.0000e- 005	1.6400e- 003	1.0000e- 005	1.6500e- 003	4.4000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.2318	1.2318	3.0000e- 005	3.0000e- 005	1.2422

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

3.6 Paving - 2024

<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					ton	s/yr							MT	/yr		
1	9.8800e- 003	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1884
	6.6300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0165	0.0953	0.1463	2.3000e- 004		4.6900e- 003	4.6900e- 003		4.3100e- 003	4.3100e- 003	0.0000	20.0265	20.0265	6.4800e- 003	0.0000	20.1884

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	4.9000e- 004	3.5000e- 004	4.5300e- 003	1.0000e- 005	5.0000e- 004	1.0000e- 005	5.1000e- 004	1.6000e- 004	1.0000e- 005	1.6000e- 004	0.0000	1.2318	1.2318	3.0000e- 005	3.0000e- 005	1.2422
Total	4.9000e- 004	3.5000e- 004	4.5300e- 003	1.0000e- 005	5.0000e- 004	1.0000e- 005	5.1000e- 004	1.6000e- 004	1.0000e- 005	1.6000e- 004	0.0000	1.2318	1.2318	3.0000e- 005	3.0000e- 005	1.2422

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

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					ton	s/yr							MT	/yr		
Mitigated	0.3166	0.5553	3.6354	8.5300e- 003	0.8992	6.7500e- 003	0.9059	0.2402	6.3200e- 003	0.2465	0.0000	789.3748	789.3748	0.0417	0.0382	801.8096
Unmitigated	0.3166	0.5553	3.6354	8.5300e- 003	0.8992	6.7500e- 003	0.9059	0.2402	6.3200e- 003	0.2465	0.0000	789.3748	789.3748	0.0417	0.0382	801.8096

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	12.11	12.11	12.11	47,699	47,699
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	508.62	508.62	508.62	2,336,993	2,336,993
Total	520.73	520.73	520.73	2,384,692	2,384,692

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0 /

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

		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
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

CalEEMod Version: CalEEMod.2020.4.0 Page 24 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

	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	7/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0663	146.0663	0.0123	1.4900e- 003	146.8199
Electricity Unmitigated				Y		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	146.0663	146.0663	0.0123	1.4900e- 003	146.8199
NaturalGas Mitigated	3.3200e- 003	0.0301	0.0253	1.8000e- 004	 	2.2900e- 003	2.2900e- 003	i i	2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.3000e- 004	6.0000e- 004	33.0111
NaturalGas Unmitigated	3.3200e- 003	0.0301	0.0253	1.8000e- 004	i i	2.2900e- 003	2.2900e- 003	i i i	2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.3000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 25 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	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					ton	s/yr							MT	-/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	24010	1.3000e- 004	1.1800e- 003	9.9000e- 004	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2813	1.2813	2.0000e- 005	2.0000e- 005	1.2889
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	590940	3.1900e- 003	0.0290	0.0243	1.7000e- 004		2.2000e- 003	2.2000e- 003		2.2000e- 003	2.2000e- 003	0.0000	31.5348	31.5348	6.0000e- 004	5.8000e- 004	31.7222
Total		3.3200e- 003	0.0302	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.2000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 26 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

5.2 Energy by Land Use - NaturalGas

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					ton	s/yr							MT	-/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	24010	1.3000e- 004	1.1800e- 003	9.9000e- 004	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2813	1.2813	2.0000e- 005	2.0000e- 005	1.2889
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	590940	3.1900e- 003	0.0290	0.0243	1.7000e- 004		2.2000e- 003	2.2000e- 003		2.2000e- 003	2.2000e- 003	0.0000	31.5348	31.5348	6.0000e- 004	5.8000e- 004	31.7222
Total		3.3200e- 003	0.0302	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.2000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 27 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	64330	11.4086	9.6000e- 004	1.2000e- 004	11.4675
Parking Lot	77215.6	13.6938	1.1600e- 003	1.4000e- 004	13.7645
Unrefrigerated Warehouse-No Rail	682080	120.9639	0.0102	1.2400e- 003	121.5879
Total		146.0663	0.0123	1.5000e- 003	146.8199

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e						
Land Use	kWh/yr	MT/yr									
City Park	0	0.0000	0.0000	0.0000	0.0000						
General Office Building	64330	11.4086	9.6000e- 004	1.2000e- 004	11.4675						
Parking Lot	77215.6	13.6938	1.1600e- 003	1.4000e- 004	13.7645						
Unrefrigerated Warehouse-No Rail	682080	120.9639	0.0102	1.2400e- 003	121.5879						
Total		146.0663	0.0123	1.5000e- 003	146.8199						

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

CalEEMod Version: CalEEMod.2020.4.0 Page 29 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

	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	tons/yr								MT/yr							
	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Unmitigated	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr								MT/yr							
Architectural Coating	0.0713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1026				• • • • • • • • • • • • • • • • • • •	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e- 004	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Total	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

CalEEMod Version: CalEEMod.2020.4.0 Page 30 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

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	0.0713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1.1026		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	3.6000e- 004	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Total	1.1743	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 31 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

	Total CO2	CH4	N2O	CO2e							
Category		MT/yr									
Willigatoa	187.3282	2.2699	0.0550	260.4527							
- Ciminigatou	187.3282	2.2699	0.0550	260.4527							

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e					
Land Use	Mgal	МТ/уг								
City Park	0 / 2.02552	3.9909	3.4000e- 004	4.0000e- 005	4.0115					
General Office Building	1.24414 / 0.762535	4.7701	0.0409	1.0000e- 003	6.0915					
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000					
Unrefrigerated Warehouse-No Rail	67.9875 / 0	178.5671	2.2286	0.0539	250.3497					
Total		187.3282	2.2699	0.0550	260.4527					

CalEEMod Version: CalEEMod.2020.4.0 Page 32 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e					
Land Use	Mgal	MT/yr								
City Park	0 / 2.02552	3.9909	3.4000e- 004	4.0000e- 005	4.0115					
General Office Building	1.24414 / 0.762535	4.7701	0.0409	1.0000e- 003	6.0915					
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000					
Unrefrigerated Warehouse-No Rail	67.9875 / 0	178.5671	2.2286	0.0539	250.3497					
Total		187.3282	2.2699	0.0550	260.4527					

8.0 Waste Detail

8.1 Mitigation Measures Waste

CalEEMod Version: CalEEMod.2020.4.0 Page 33 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

Category/Year

	Total CO2	CH4	N2O	CO2e							
		MT/yr									
gatea	57.4505	3.3952	0.0000	142.3312							
Jgatea	57.4505	3.3952	0.0000	142.3312							

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e						
Land Use	tons	MT/yr									
City Park	0.15	0.0305	1.8000e- 003	0.0000	0.0754						
General Office Building	6.51	1.3215	0.0781	0.0000	3.2739						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000						
Unrefrigerated Warehouse-No Rail	276.36	56.0986	3.3153	0.0000	138.9819						
Total		57.4505	3.3952	0.0000	142.3312						

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									
City Park	0.15	0.0305	1.8000e- 003	0.0000	0.0754						
General Office Building	6.51	1.3215	0.0781	0.0000	3.2739						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000						
Unrefrigerated Warehouse-No Rail	276.36	56.0986	3.3153	0.0000	138.9819						
Total		57.4505	3.3952	0.0000	142.3312						

9.0 Operational Offroad

Equipment Type	Number Hours/Day		Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	10	8.00	260	89	0.20	Electrical

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

UnMitigated/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
Equipment Type	tons/yr								MT/yr							
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.5	6	350	0.73	Diesel

Boilers

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

User Defined Equipment

	Equipment Type	Number
--	----------------	--------

CalEEMod Version: CalEEMod.2020.4.0 Page 36 of 36 Date: 11/9/2022 1:00 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

10.1 Stationary Sources

Unmitigated/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
Equipment Type					ton	s/yr				MT	/yr					
Fire Pump - Diesel (300 - 600 HP)		4.8200e- 003	4.3900e- 003	1.0000e- 005		2.5000e- 004	2.5000e- 004		2.5000e- 004	2.5000e- 004	0.0000	0.7997	0.7997	1.1000e- 004	0.0000	0.8025
Total	1.7200e- 003	4.8200e- 003	4.3900e- 003	1.0000e- 005		2.5000e- 004	2.5000e- 004		2.5000e- 004	2.5000e- 004	0.0000	0.7997	0.7997	1.1000e- 004	0.0000	0.8025

11.0 Vegetation

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

5780.0001 Lilac and Santa Ana Warehouse Project

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32Climate Zone10Operational Year2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note B

Construction Phase - See Note C

Trips and VMT - See Note F

Demolition - See Note E

Grading - See Note D

Architectural Coating - See Note G

Vehicle Trips - See Note H

Area Coating - See Note J

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

Construction Off-road Equipment Mitigation - See Note M

Area Mitigation - See Note N

Operational Off-Road Equipment - See Note K

Fleet Mix - See Note I

Stationary Sources - Emergency Generators and Fire Pumps - See Note L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	300.00	210.00
tblGrading	MaterialImported	0.00	36,500.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripNumber	4,563.00	4,562.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

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

tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.73
tblVehicleTrips	ST_TR	1.74	1.73
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	1.73
tblVehicleTrips	SU_TR	1.74	1.73
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	1.73
tblVehicleTrips	WD_TR	1.74	1.73

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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/day												lb/c	lay		
2023	3.9242	64.8893	36.1133	0.2301	14.8875	1.7756	16.6631	5.1931	1.6464	6.8396	0.0000	24,315.80 49	24,315.80 49	2.7305	2.8746	25,240.68 26
2024	40.2001	28.3121	44.9999	0.1005	4.1376	1.1848	5.3224	1.1116	1.1084	2.2201	0.0000	9,975.423 8	9,975.423 8	1.4512	0.3438	10,114.15 81
Maximum	40.2001	64.8893	44.9999	0.2301	14.8875	1.7756	16.6631	5.1931	1.6464	6.8396	0.0000	24,315.80 49	24,315.80 49	2.7305	2.8746	25,240.68 26

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/day											lb/d	day			
2023	3.9242	64.8893	36.1133	0.2301	5.8171	1.7756	7.5927	2.1239	1.6464	3.7703	0.0000	24,315.80 49	24,315.80 49	2.7305	2.8746	25,240.68 26
2024	40.2001	28.3121	44.9999	0.1005	1.3390	1.1848	2.5238	0.4247	1.1084	1.5331	0.0000	9,975.423 8	9,975.423 8	1.4512	0.3438	10,114.15 81
Maximum	40.2001	64.8893	44.9999	0.2301	5.8171	1.7756	7.5927	2.1239	1.6464	3.7703	0.0000	24,315.80 49	24,315.80 49	2.7305	2.8746	25,240.68 26

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	62.39	0.00	53.99	59.58	0.00	41.46	0.00	0.00	0.00	0.00	0.00	0.00

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	day		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004	 	0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	1.9709	2.8112	21.6976	0.0499	5.0354	0.0371	5.0725	1.3430	0.0347	1.3777		5,084.310 6	5,084.310 6	0.2469	0.2229	5,156.908 0
Offroad	0.0000	0.0000	0.0000	0.0000	 - 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	,	0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206	,	147.4299
Total	8.7115	3.7793	22.6000	0.0522	5.0354	0.0920	5.1274	1.3430	0.0897	1.4326	0.0000	5,429.504 0	5,429.504 0	0.2715	0.2265	5,503.798 7

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	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/e	day							lb/d	day		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	1.9709	2.8112	21.6976	0.0499	5.0354	0.0371	5.0725	1.3430	0.0347	1.3777		5,084.310 6	5,084.310 6	0.2469	0.2229	5,156.908 0
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	, , , ,	0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206	,	147.4299
Total	8.7115	3.7793	22.6000	0.0522	5.0354	0.0920	5.1274	1.3430	0.0897	1.4326	0.0000	5,429.504 0	5,429.504 0	0.2715	0.2265	5,503.798 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	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	7/3/2023	7/28/2023	5	20	
2	Grading	Grading	7/29/2023	9/8/2023	5	30	
3	Building Construction	Building Construction	9/9/2023	6/28/2024	5	210	

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

4	Architectural Coating	Architectural Coating	5/6/2024	6/28/2024	5	40	
5	Paving	Paving	6/3/2024	6/28/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 451,500; Non-Residential Outdoor: 150,500; Striped Parking Area: 13,237 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

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	348.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,562.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	98.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.7705	0.0000	3.7705	0.5709	0.0000	0.5709			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	3.7705	0.9975	4.7680	0.5709	0.9280	1.4989		3,746.984 0	3,746.984 0	1.0494		3,773.218 3

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0600	3.4701	0.8364	0.0190	0.6090	0.0401	0.6491	0.1670	0.0383	0.2053		2,071.354 2	2,071.354 2	0.0894	0.3284	2,171.442 5
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	0.0586	0.0354	0.5641	1.5000e- 003	0.1677	8.3000e- 004	0.1685	0.0445	7.6000e- 004	0.0452		151.3517	151.3517	3.6600e- 003	3.6000e- 003	152.5171
Total	0.1186	3.5054	1.4006	0.0205	0.7767	0.0409	0.8176	0.2114	0.0391	0.2505		2,222.705 9	2,222.705 9	0.0931	0.3320	2,323.959 6

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					1.4705	0.0000	1.4705	0.2227	0.0000	0.2227			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388	 	0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	1.4705	0.9975	2.4680	0.2227	0.9280	1.1506	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 - 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					lb/d	day							lb/d	day		
Hauling	0.0600	3.4701	0.8364	0.0190	0.2410	0.0401	0.2810	0.0766	0.0383	0.1150		2,071.354 2	2,071.354 2	0.0894	0.3284	2,171.442 5
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	0.0586	0.0354	0.5641	1.5000e- 003	0.0511	8.3000e- 004	0.0519	0.0158	7.6000e- 004	0.0166		151.3517	151.3517	3.6600e- 003	3.6000e- 003	152.5171
Total	0.1186	3.5054	1.4006	0.0205	0.2920	0.0409	0.3329	0.0925	0.0391	0.1316		2,222.705 9	2,222.705 9	0.0931	0.3320	2,323.959 6

3.3 Grading - 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					lb/d	day							lb/c	day		
Fugitive Dust					9.3412	0.0000	9.3412	3.6746	0.0000	3.6746			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.3412	1.4245	10.7657	3.6746	1.3105	4.9851		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Grading - 2023

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	0.5243	30.3265	7.3099	0.1660	5.3227	0.3500	5.6728	1.4592	0.3349	1.7941		18,102.52 49	18,102.52 49	0.7814	2.8698	18,977.24 29
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	0.6025	30.3737	8.0621	0.1680	5.5463	0.3511	5.8974	1.5185	0.3359	1.8544		18,304.32 72	18,304.32 72	0.7862	2.8746	19,180.59 90

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					3.6431	0.0000	3.6431	1.4331	0.0000	1.4331			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	3.6431	1.4245	5.0676	1.4331	1.3105	2.7436	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.5243	30.3265	7.3099	0.1660	2.1059	0.3500	2.4560	0.6697	0.3349	1.0046		18,102.52 49	18,102.52 49	0.7814	2.8698	18,977.24 29
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	0.0681	1.1000e- 003	0.0692	0.0211	1.0100e- 003	0.0221		201.8023	201.8023	4.8800e- 003	4.8000e- 003	203.3561
Total	0.6025	30.3737	8.0621	0.1680	2.1740	0.3511	2.5251	0.6908	0.3359	1.0267		18,304.32 72	18,304.32 72	0.7862	2.8746	19,180.59 90

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Building Construction - 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					lb/d	day							lb/c	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	0.1147	3.4374	1.4424	0.0175	0.6279	0.0258	0.6537	0.1808	0.0247	0.2055		1,880.798 2	1,880.798 2	0.0492	0.2777	1,964.794 3
Worker	0.9730	0.5871	9.3648	0.0249	2.7832	0.0137	2.7969	0.7381	0.0126	0.7507		2,512.438 0	2,512.438 0	0.0608	0.0598	2,531.783 8
Total	1.0877	4.0245	10.8072	0.0424	3.4111	0.0395	3.4506	0.9189	0.0373	0.9562		4,393.236 2	4,393.236 2	0.1099	0.3376	4,496.578 1

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

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 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					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	0.1147	3.4374	1.4424	0.0175	0.2703	0.0258	0.2961	0.0930	0.0247	0.1177		1,880.798 2	1,880.798 2	0.0492	0.2777	1,964.794 3
Worker	0.9730	0.5871	9.3648	0.0249	0.8475	0.0137	0.8612	0.2630	0.0126	0.2756		2,512.438 0	2,512.438 0	0.0608	0.0598	2,531.783 8
Total	1.0877	4.0245	10.8072	0.0424	1.1178	0.0395	1.1573	0.3560	0.0373	0.3933		4,393.236 2	4,393.236 2	0.1099	0.3376	4,496.578 1

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Building Construction - 2024 <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					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	0.1121	3.4680	1.4184	0.0173	0.6279	0.0254	0.6533	0.1808	0.0243	0.2051		1,854.888 9	1,854.888 9	0.0477	0.2739	1,937.696 8
Worker	0.9036	0.5210	8.7061	0.0241	2.7832	0.0132	2.7964	0.7381	0.0121	0.7502		2,439.122 2	2,439.122 2	0.0550	0.0555	2,457.021 8
Total	1.0156	3.9889	10.1245	0.0414	3.4111	0.0386	3.4497	0.9189	0.0364	0.9554		4,294.011 0	4,294.011 0	0.1026	0.3293	4,394.718 6

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Building Construction - 2024

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/c	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	0.1121	3.4680	1.4184	0.0173	0.2703	0.0254	0.2957	0.0930	0.0243	0.1174		1,854.888 9	1,854.888 9	0.0477	0.2739	1,937.696 8
Worker	0.9036	0.5210	8.7061	0.0241	0.8475	0.0132	0.8607	0.2630	0.0121	0.2751		2,439.122 2	2,439.122 2	0.0550	0.0555	2,457.021 8
Total	1.0156	3.9889	10.1245	0.0414	1.1178	0.0386	1.1563	0.3560	0.0364	0.3924		4,294.011 0	4,294.011 0	0.1026	0.3293	4,394.718 6

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	35.6453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003	 	0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	1 	281.8443
Total	35.8261	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Architectural Coating - 2024 <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					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	0.1814	0.1046	1.7482	4.8500e- 003	0.5589	2.6400e- 003	0.5615	0.1482	2.4300e- 003	0.1507		489.7836	489.7836	0.0110	0.0111	493.3779
Total	0.1814	0.1046	1.7482	4.8500e- 003	0.5589	2.6400e- 003	0.5615	0.1482	2.4300e- 003	0.1507		489.7836	489.7836	0.0110	0.0111	493.3779

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	35.6453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159	i i	281.8443
Total	35.8261	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 Architectural Coating - 2024 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/c	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	0.1814	0.1046	1.7482	4.8500e- 003	0.1702	2.6400e- 003	0.1728	0.0528	2.4300e- 003	0.0552		489.7836	489.7836	0.0110	0.0111	493.3779
Total	0.1814	0.1046	1.7482	4.8500e- 003	0.1702	2.6400e- 003	0.1728	0.0528	2.4300e- 003	0.0552		489.7836	489.7836	0.0110	0.0111	493.3779

3.6 Paving - 2024 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.6629					0.0000	0.0000		0.0000	0.0000		 	0.0000			0.0000
Total	1.6510	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396

CalEEMod Version: CalEEMod.2020.4.0 Page 19 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 - 2024
<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					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	0.0544	0.0314	0.5245	1.4500e- 003	0.1677	7.9000e- 004	0.1685	0.0445	7.3000e- 004	0.0452		146.9351	146.9351	3.3100e- 003	3.3400e- 003	148.0134
Total	0.0544	0.0314	0.5245	1.4500e- 003	0.1677	7.9000e- 004	0.1685	0.0445	7.3000e- 004	0.0452		146.9351	146.9351	3.3100e- 003	3.3400e- 003	148.0134

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		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.6629		1 1 1 1			0.0000	0.0000		0.0000	0.0000		 	0.0000			0.0000
Total	1.6510	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396

CalEEMod Version: CalEEMod.2020.4.0 Page 20 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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 - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.0544	0.0314	0.5245	1.4500e- 003	0.0511	7.9000e- 004	0.0519	0.0158	7.3000e- 004	0.0166		146.9351	146.9351	3.3100e- 003	3.3400e- 003	148.0134
Total	0.0544	0.0314	0.5245	1.4500e- 003	0.0511	7.9000e- 004	0.0519	0.0158	7.3000e- 004	0.0166		146.9351	146.9351	3.3100e- 003	3.3400e- 003	148.0134

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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	CO	SO2	Fugitive PM10	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		
Mitigated	1.9709	2.8112	21.6976	0.0499	5.0354	0.0371	5.0725	1.3430	0.0347	1.3777		5,084.310 6	5,084.310 6	0.2469	0.2229	5,156.908 0
Unmitigated	1.9709	2.8112	21.6976	0.0499	5.0354	0.0371	5.0725	1.3430	0.0347	1.3777		5,084.310 6	5,084.310 6	0.2469	0.2229	5,156.908 0

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	12.11	12.11	12.11	47,699	47,699
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	508.62	508.62	508.62	2,336,993	2,336,993
Total	520.73	520.73	520.73	2,384,692	2,384,692

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 23 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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	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	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 24 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

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/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

CalEEMod Version: CalEEMod.2020.4.0 Page 25 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 26 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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					lb/d	day							lb/d	day		
Architectural Coating	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	10	8.00	260	89	0.20	Electrical

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

UnMitigated/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
Equipment Type		lb/day											lb/c	lay		
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.5	6	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

CalEEMod Version: CalEEMod.2020.4.0 Page 28 of 28 Date: 11/9/2022 1:03 PM

5780.0001 Lilac and Santa Ana Warehouse Project - 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

10.1 Stationary Sources

Unmitigated/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
Equipment Type		lb/day											lb/c	lay		
Fire Pump - Diesel (300 - 600 HP)		0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299

11.0 Vegetation

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

5780.0001 Lilac and Santa Ana Warehouse Project

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32Climate Zone10Operational Year2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note B

Construction Phase - See Note C

Trips and VMT - See Note F

Demolition - See Note E

Grading - See Note D

Architectural Coating - See Note G

Vehicle Trips - See Note H

Area Coating - See Note J

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

Construction Off-road Equipment Mitigation - See Note M

Area Mitigation - See Note N

Operational Off-Road Equipment - See Note K

Fleet Mix - See Note I

Stationary Sources - Emergency Generators and Fire Pumps - See Note L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	300.00	210.00
tblGrading	MaterialImported	0.00	36,500.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	10.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripNumber	4,563.00	4,562.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

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

tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.73
tblVehicleTrips	ST_TR	1.74	1.73
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	1.73
tblVehicleTrips	SU_TR	1.74	1.73
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	1.73
tblVehicleTrips	WD_TR	1.74	1.73

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/c	lay		
2023	3.8937	66.4316	36.0703	0.2300	14.8875	1.7759	16.6634	5.1931	1.6467	6.8398	0.0000	24,310.87 53	24,310.87 53	2.7291	2.8769	25,236.43 10
2024	40.1530	28.5402	43.1115	0.0977	4.1376	1.1849	5.3225	1.1116	1.1085	2.2202	0.0000	9,691.384 7	9,691.384 7	1.4510	0.3469	9,831.028 8
Maximum	40.1530	66.4316	43.1115	0.2300	14.8875	1.7759	16.6634	5.1931	1.6467	6.8398	0.0000	24,310.87 53	24,310.87 53	2.7291	2.8769	25,236.43 10

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	lay		
2023	3.8937	66.4316	36.0703	0.2300	5.8171	1.7759	7.5930	2.1239	1.6467	3.7706	0.0000	24,310.87 53	24,310.87 53	2.7291	2.8769	25,236.43 10
2024	40.1530	28.5402	43.1115	0.0977	1.3390	1.1849	2.5239	0.4247	1.1085	1.5332	0.0000	9,691.384 7	9,691.384 7	1.4510	0.3469	9,831.028 8
Maximum	40.1530	66.4316	43.1115	0.2300	5.8171	1.7759	7.5930	2.1239	1.6467	3.7706	0.0000	24,310.87 53	24,310.87 53	2.7291	2.8769	25,236.43 10

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	62.39	0.00	53.98	59.58	0.00	41.46	0.00	0.00	0.00	0.00	0.00	0.00

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/day						
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718		
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890		
Mobile	1.7464	2.9852	19.1501	0.0462	5.0354	0.0371	5.0726	1.3430	0.0348	1.3777		4,716.168 6	4,716.168 6	0.2501	0.2283	4,790.440 4		
Offroad	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299		
Total	8.4870	3.9534	20.0525	0.0486	5.0354	0.0920	5.1275	1.3430	0.0897	1.4327	0.0000	5,061.362 1	5,061.362 1	0.2746	0.2319	5,137.331 0		

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	lb/day									lb/day						
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	1.7464	2.9852	19.1501	0.0462	5.0354	0.0371	5.0726	1.3430	0.0348	1.3777		4,716.168 6	4,716.168 6	0.2501	0.2283	4,790.440 4
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	8.4870	3.9534	20.0525	0.0486	5.0354	0.0920	5.1275	1.3430	0.0897	1.4327	0.0000	5,061.362 1	5,061.362 1	0.2746	0.2319	5,137.331 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	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	7/3/2023	7/28/2023	5	20	
2	Grading	Grading	7/29/2023	9/8/2023	5	30	
3	Building Construction	Building Construction	9/9/2023	6/28/2024	5	210	

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

4	Architectural Coating	Architectural Coating	5/6/2024	6/28/2024	5	40	
5	Paving	Paving	6/3/2024	6/28/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 90

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 451,500; Non-Residential Outdoor: 150,500; Striped Parking Area: 13,237 (Architectural Coating – sqft)

OffRoad Equipment

Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Concrete/Industrial Saws	1	8.00	81	0.73
Excavators	3	8.00	158	0.38
Rubber Tired Dozers	2	8.00	247	0.40
Excavators	2	8.00	158	0.38
Graders	1	8.00	187	0.41
Rubber Tired Dozers	1	8.00	247	0.40
Scrapers	2	8.00	367	0.48
Tractors/Loaders/Backhoes	2	8.00	97	0.37
Cranes	1	7.00	231	0.29
Forklifts	3	8.00	89	0.20
Generator Sets	1	8.00	84	0.74
Tractors/Loaders/Backhoes	3	7.00	97	0.37
Welders	1	8.00	46	0.45
Air Compressors	1	6.00	78	0.48
Pavers	2	8.00	130	0.42
Paving Equipment	2	8.00	132	0.36
Rollers	2	8.00	80	0.38
	Concrete/Industrial Saws Excavators Rubber Tired Dozers Excavators Graders Rubber Tired Dozers Scrapers Tractors/Loaders/Backhoes Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders Air Compressors Pavers Paving Equipment	Concrete/Industrial Saws 1 Excavators 3 Rubber Tired Dozers 2 Excavators 2 Graders 1 Rubber Tired Dozers 1 Scrapers 2 Tractors/Loaders/Backhoes 2 Cranes 1 Forklifts 3 Generator Sets 1 Tractors/Loaders/Backhoes 3 Welders 1 Air Compressors 1 Pavers 2 Paving Equipment 2	Concrete/Industrial Saws 1 8.00 Excavators 3 8.00 Rubber Tired Dozers 2 8.00 Excavators 2 8.00 Graders 1 8.00 Rubber Tired Dozers 1 8.00 Scrapers 2 8.00 Tractors/Loaders/Backhoes 2 8.00 Cranes 1 7.00 Forklifts 3 8.00 Generator Sets 1 8.00 Tractors/Loaders/Backhoes 3 7.00 Welders 1 8.00 Air Compressors 1 6.00 Pavers 2 8.00 Paving Equipment 2 8.00	Concrete/Industrial Saws 1 8.00 81 Excavators 3 8.00 158 Rubber Tired Dozers 2 8.00 247 Excavators 2 8.00 158 Graders 1 8.00 187 Rubber Tired Dozers 1 8.00 247 Scrapers 2 8.00 367 Tractors/Loaders/Backhoes 2 8.00 97 Cranes 1 7.00 231 Forklifts 3 8.00 89 Generator Sets 1 8.00 84 Tractors/Loaders/Backhoes 3 7.00 97 Welders 1 8.00 46 Air Compressors 1 6.00 78 Pavers 2 8.00 130 Paving Equipment 2 8.00 132

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

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	348.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	4,562.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	249.00	98.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.7705	0.0000	3.7705	0.5709	0.0000	0.5709			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	3.7705	0.9975	4.7680	0.5709	0.9280	1.4989		3,746.984 0	3,746.984 0	1.0494		3,773.218 3

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.2 Demolition - 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					lb/	day							lb/d	day		
Hauling	0.0568	3.6463	0.8467	0.0190	0.6090	0.0401	0.6491	0.1670	0.0384	0.2053		2,072.961 2	2,072.961 2	0.0893	0.3286	2,173.121 8
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	0.0565	0.0372	0.4643	1.3600e- 003	0.1677	8.3000e- 004	0.1685	0.0445	7.6000e- 004	0.0452		137.1216	137.1216	3.6600e- 003	3.7200e- 003	138.3216
Total	0.1133	3.6835	1.3111	0.0204	0.7767	0.0409	0.8176	0.2114	0.0391	0.2506		2,210.082 8	2,210.082 8	0.0929	0.3323	2,311.443 4

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/c	lay		
Fugitive Dust					1.4705	0.0000	1.4705	0.2227	0.0000	0.2227		i i	0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4844	19.6434	0.0388	1.4705	0.9975	2.4680	0.2227	0.9280	1.1506	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.2 **Demolition - 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					lb/d	day							lb/d	day		
Hauling	0.0568	3.6463	0.8467	0.0190	0.2410	0.0401	0.2811	0.0766	0.0384	0.1150		2,072.961 2	2,072.961 2	0.0893	0.3286	2,173.121 8
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	0.0565	0.0372	0.4643	1.3600e- 003	0.0511	8.3000e- 004	0.0519	0.0158	7.6000e- 004	0.0166		137.1216	137.1216	3.6600e- 003	3.7200e- 003	138.3216
Total	0.1133	3.6835	1.3111	0.0204	0.2920	0.0409	0.3329	0.0925	0.0391	0.1316		2,210.082 8	2,210.082 8	0.0929	0.3323	2,311.443 4

3.3 Grading - 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					lb/d	day							lb/c	day		
Fugitive Dust					9.3412	0.0000	9.3412	3.6746	0.0000	3.6746			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.3412	1.4245	10.7657	3.6746	1.3105	4.9851		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.3 Grading - 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					lb/d	day							lb/d	day		
Hauling	0.4967	31.8664	7.4001	0.1661	5.3227	0.3503	5.6731	1.4592	0.3352	1.7944		18,116.56 88	18,116.56 88	0.7800	2.8720	18,991.91 86
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	0.0753	0.0496	0.6191	1.8100e- 003	0.2236	1.1000e- 003	0.2247	0.0593	1.0100e- 003	0.0603		182.8288	182.8288	4.8900e- 003	4.9600e- 003	184.4288
Total	0.5720	31.9160	8.0192	0.1680	5.5463	0.3514	5.8977	1.5185	0.3362	1.8547		18,299.39 75	18,299.39 75	0.7849	2.8769	19,176.34 74

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/c	day		
Fugitive Dust					3.6431	0.0000	3.6431	1.4331	0.0000	1.4331			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245	 	1.3105	1.3105	0.0000	6,011.477 7	6,011.477 7	1.9442	 	6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	3.6431	1.4245	5.0676	1.4331	1.3105	2.7436	0.0000	6,011.477 7	6,011.477 7	1.9442		6,060.083 6

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.4967	31.8664	7.4001	0.1661	2.1059	0.3503	2.4563	0.6697	0.3352	1.0048		18,116.56 88	18,116.56 88	0.7800	2.8720	18,991.91 86
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	0.0753	0.0496	0.6191	1.8100e- 003	0.0681	1.1000e- 003	0.0692	0.0211	1.0100e- 003	0.0221		182.8288	182.8288	4.8900e- 003	4.9600e- 003	184.4288
Total	0.5720	31.9160	8.0192	0.1680	2.1740	0.3514	2.5254	0.6908	0.3362	1.0270		18,299.39 75	18,299.39 75	0.7849	2.8769	19,176.34 74

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.4 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					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	0.1067	3.6308	1.4869	0.0176	0.6279	0.0259	0.6538	0.1808	0.0248	0.2056		1,885.359 3	1,885.359 3	0.0488	0.2786	1,969.602 7
Worker	0.9373	0.6173	7.7077	0.0225	2.7832	0.0137	2.7969	0.7381	0.0126	0.7507		2,276.218 0	2,276.218 0	0.0608	0.0617	2,296.138 7
Total	1.0440	4.2481	9.1946	0.0401	3.4111	0.0397	3.4507	0.9189	0.0374	0.9564		4,161.577 3	4,161.577 3	0.1096	0.3404	4,265.741 5

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

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.4 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					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	0.1067	3.6308	1.4869	0.0176	0.2703	0.0259	0.2962	0.0930	0.0248	0.1178		1,885.359 3	1,885.359 3	0.0488	0.2786	1,969.602 7
Worker	0.9373	0.6173	7.7077	0.0225	0.8475	0.0137	0.8612	0.2630	0.0126	0.2756		2,276.218 0	2,276.218 0	0.0608	0.0617	2,296.138 7
Total	1.0440	4.2481	9.1946	0.0401	1.1178	0.0397	1.1574	0.3560	0.0374	0.3934		4,161.577 3	4,161.577 3	0.1096	0.3404	4,265.741 5

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.4 Building Construction - 2024 <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					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	0.1041	3.6626	1.4625	0.0173	0.6279	0.0255	0.6534	0.1808	0.0244	0.2052		1,859.422 3	1,859.422 3	0.0473	0.2747	1,942.471 8
Worker	0.8725	0.5475	7.1736	0.0219	2.7832	0.0132	2.7964	0.7381	0.0121	0.7502		2,210.286 0	2,210.286 0	0.0552	0.0572	2,228.715 5
Total	0.9766	4.2102	8.6361	0.0392	3.4111	0.0387	3.4498	0.9189	0.0365	0.9555		4,069.708 3	4,069.708 3	0.1024	0.3319	4,171.187 3

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133	1 1 1	0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.1041	3.6626	1.4625	0.0173	0.2703	0.0255	0.2958	0.0930	0.0244	0.1174		1,859.422 3	1,859.422 3	0.0473	0.2747	1,942.471 8
Worker	0.8725	0.5475	7.1736	0.0219	0.8475	0.0132	0.8607	0.2630	0.0121	0.2751		2,210.286 0	2,210.286 0	0.0552	0.0572	2,228.715 5
Total	0.9766	4.2102	8.6361	0.0392	1.1178	0.0387	1.1564	0.3560	0.0365	0.3925		4,069.708 3	4,069.708 3	0.1024	0.3319	4,171.187 3

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	35.6453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	35.8261	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.5 Architectural Coating - 2024 <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					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	0.1752	0.1099	1.4405	4.3900e- 003	0.5589	2.6400e- 003	0.5615	0.1482	2.4300e- 003	0.1507		443.8325	443.8325	0.0111	0.0115	447.5332
Total	0.1752	0.1099	1.4405	4.3900e- 003	0.5589	2.6400e- 003	0.5615	0.1482	2.4300e- 003	0.1507		443.8325	443.8325	0.0111	0.0115	447.5332

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	35.6453					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003	 	0.0609	0.0609	 	0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	35.8261	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.5 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	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	0.1752	0.1099	1.4405	4.3900e- 003	0.1702	2.6400e- 003	0.1728	0.0528	2.4300e- 003	0.0552		443.8325	443.8325	0.0111	0.0115	447.5332
Total	0.1752	0.1099	1.4405	4.3900e- 003	0.1702	2.6400e- 003	0.1728	0.0528	2.4300e- 003	0.0552		443.8325	443.8325	0.0111	0.0115	447.5332

3.6 Paving - 2024 <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		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.6629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6510	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2020.4.0 Page 19 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.6 Paving - 2024
<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					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	0.0526	0.0330	0.4321	1.3200e- 003	0.1677	7.9000e- 004	0.1685	0.0445	7.3000e- 004	0.0452		133.1498	133.1498	3.3200e- 003	3.4500e- 003	134.2600
Total	0.0526	0.0330	0.4321	1.3200e- 003	0.1677	7.9000e- 004	0.1685	0.0445	7.3000e- 004	0.0452		133.1498	133.1498	3.3200e- 003	3.4500e- 003	134.2600

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.6629				 	0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Total	1.6510	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

CalEEMod Version: CalEEMod.2020.4.0 Page 20 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.0526	0.0330	0.4321	1.3200e- 003	0.0511	7.9000e- 004	0.0519	0.0158	7.3000e- 004	0.0166		133.1498	133.1498	3.3200e- 003	3.4500e- 003	134.2600
Total	0.0526	0.0330	0.4321	1.3200e- 003	0.0511	7.9000e- 004	0.0519	0.0158	7.3000e- 004	0.0166		133.1498	133.1498	3.3200e- 003	3.4500e- 003	134.2600

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2020.4.0 Page 21 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	1.7464	2.9852	19.1501	0.0462	5.0354	0.0371	5.0726	1.3430	0.0348	1.3777		4,716.168 6	4,716.168 6	0.2501	0.2283	4,790.440 4
Unmitigated	1.7464	2.9852	19.1501	0.0462	5.0354	0.0371	5.0726	1.3430	0.0348	1.3777		4,716.168 6	4,716.168 6	0.2501	0.2283	4,790.440 4

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	12.11	12.11	12.11	47,699	47,699
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	508.62	508.62	508.62	2,336,993	2,336,993
Total	520.73	520.73	520.73	2,384,692	2,384,692

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 23 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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	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/	day							lb/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004	 	4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 24 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

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		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

CalEEMod Version: CalEEMod.2020.4.0 Page 25 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/d	lay		
Mitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.4353	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004	i i	1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 26 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/d	day		
Coating	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
, , , ,	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	10	8.00	260	89	0.20	Electrical

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

UnMitigated/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
Equipment Type					lb/d	day							lb/c	lay		
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.5	6	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

CalEEMod Version: CalEEMod.2020.4.0 Page 28 of 28 Date: 11/9/2022 1:04 PM

5780.0001 Lilac and Santa Ana Warehouse Project - San Bernardino-South Coast County, Winter

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type					lb/d	day							lb/c	lay		
Fire Pump - Diesel (300 - 600 HP)	. 0.2072	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299

11.0 Vegetation

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 32

Climate Zone 10 **Operational Year** 2024

Utility Company Southern California Edison

CO2 Intensity 390.98 **CH4 Intensity** 0.033 **N2O Intensity** 0.004 (lb/MWhr) (lb/MWhr) (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note R

Land Use - See Note S

Construction Phase - See Note T

Off-road Equipment - See Note U

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	9/21/2023	6/28/2024
tblConstructionPhase	PhaseEndDate	10/5/2023	6/28/2024
tblConstructionPhase	PhaseStartDate	12/16/2022	6/3/2024

CalEEMod Version: CalEEMod.2020.4.0 Page 2 of 19

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

tblConstructionPhase	PhaseStartDate	9/22/2023	6/3/2024
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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	tons/yr										MT/yr					
	0.0213	0.1480	0.2138	3.7000e- 004	5.0800e- 003	6.2700e- 003	0.0114	1.3700e- 003	5.9800e- 003	7.3500e- 003	0.0000	31.3087	31.3087	5.6600e- 003	3.7000e- 004	31.5590
Maximum	0.0213	0.1480	0.2138	3.7000e- 004	5.0800e- 003	6.2700e- 003	0.0114	1.3700e- 003	5.9800e- 003	7.3500e- 003	0.0000	31.3087	31.3087	5.6600e- 003	3.7000e- 004	31.5590

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.0213	0.1480	0.2138	3.7000e- 004	5.0800e- 003	6.2700e- 003	0.0114	1.3700e- 003	5.9800e- 003	7.3500e- 003	0.0000	31.3087	31.3087	5.6600e- 003	3.7000e- 004	31.5590
Maximum	0.0213	0.1480	0.2138	3.7000e- 004	5.0800e- 003	6.2700e- 003	0.0114	1.3700e- 003	5.9800e- 003	7.3500e- 003	0.0000	31.3087	31.3087	5.6600e- 003	3.7000e- 004	31.5590

Date: 11/10/2022 3:37 PM

CalEEMod Version: CalEEMod.2020.4.0 Page 3 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
7	5-10-2024	8-9-2024	0.1570	0.1570
		Highest	0.1570	0.1570

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	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	4.0557	4.0557	3.4000e- 004	4.0000e- 005	4.0766
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	,,					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	n					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.1300e- 003	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0558	4.0558	3.4000e- 004	4.0000e- 005	4.0767

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

2.2 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	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0557	4.0557	3.4000e- 004	4.0000e- 005	4.0766
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	,		,			0.0000	0.0000	, 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	,		,			0.0000	0.0000	, 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.1300e- 003	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	4.0558	4.0558	3.4000e- 004	4.0000e- 005	4.0767

	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	Building Construction	Building Construction	6/3/2024	6/28/2024	5	20	
2	Paving	Paving	6/3/2024	6/28/2024	5	20	

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	6	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0117	0.0844	0.1119	1.8000e- 004		3.4100e- 003	3.4100e- 003		3.3400e- 003	3.3400e- 003	0.0000	14.3591	14.3591	1.7900e- 003	0.0000	14.4039
Total	0.0117	0.0844	0.1119	1.8000e- 004		3.4100e- 003	3.4100e- 003		3.3400e- 003	3.3400e- 003	0.0000	14.3591	14.3591	1.7900e- 003	0.0000	14.4039

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	1.2000e- 004	4.0900e- 003	1.6200e- 003	2.0000e- 005	6.9000e- 004	3.0000e- 005	7.2000e- 004	2.0000e- 004	3.0000e- 005	2.3000e- 004	0.0000	1.8907	1.8907	5.0000e- 005	2.8000e- 004	1.9752
Worker	8.7000e- 004	6.2000e- 004	8.1500e- 003	2.0000e- 005	2.9600e- 003	1.0000e- 005	2.9700e- 003	7.9000e- 004	1.0000e- 005	8.0000e- 004	0.0000	2.2173	2.2173	6.0000e- 005	6.0000e- 005	2.2360
Total	9.9000e- 004	4.7100e- 003	9.7700e- 003	4.0000e- 005	3.6500e- 003	4.0000e- 005	3.6900e- 003	9.9000e- 004	4.0000e- 005	1.0300e- 003	0.0000	4.1080	4.1080	1.1000e- 004	3.4000e- 004	4.2112

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

3.2 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0117	0.0844	0.1119	1.8000e- 004		3.4100e- 003	3.4100e- 003		3.3400e- 003	3.3400e- 003	0.0000	14.3591	14.3591	1.7900e- 003	0.0000	14.4039
Total	0.0117	0.0844	0.1119	1.8000e- 004		3.4100e- 003	3.4100e- 003		3.3400e- 003	3.3400e- 003	0.0000	14.3591	14.3591	1.7900e- 003	0.0000	14.4039

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	1.2000e- 004	4.0900e- 003	1.6200e- 003	2.0000e- 005	6.9000e- 004	3.0000e- 005	7.2000e- 004	2.0000e- 004	3.0000e- 005	2.3000e- 004	0.0000	1.8907	1.8907	5.0000e- 005	2.8000e- 004	1.9752
Worker	8.7000e- 004	6.2000e- 004	8.1500e- 003	2.0000e- 005	2.9600e- 003	1.0000e- 005	2.9700e- 003	7.9000e- 004	1.0000e- 005	8.0000e- 004	0.0000	2.2173	2.2173	6.0000e- 005	6.0000e- 005	2.2360
Total	9.9000e- 004	4.7100e- 003	9.7700e- 003	4.0000e- 005	3.6500e- 003	4.0000e- 005	3.6900e- 003	9.9000e- 004	4.0000e- 005	1.0300e- 003	0.0000	4.1080	4.1080	1.1000e- 004	3.4000e- 004	4.2112

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

3.3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	6.1800e- 003	0.0586	0.0883	1.4000e- 004		2.8100e- 003	2.8100e- 003		2.5900e- 003	2.5900e- 003	0.0000	11.7741	11.7741	3.7300e- 003	0.0000	11.8674
Paving	1.9700e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.1500e- 003	0.0586	0.0883	1.4000e- 004		2.8100e- 003	2.8100e- 003		2.5900e- 003	2.5900e- 003	0.0000	11.7741	11.7741	3.7300e- 003	0.0000	11.8674

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	4.2000e- 004	3.0000e- 004	3.9300e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0676	1.0676	3.0000e- 005	3.0000e- 005	1.0766
Total	4.2000e- 004	3.0000e- 004	3.9300e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0676	1.0676	3.0000e- 005	3.0000e- 005	1.0766

Page 9 of 19 CalEEMod Version: CalEEMod.2020.4.0 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

3.3 Paving - 2024 **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Off-Road	6.1800e- 003	0.0586	0.0883	1.4000e- 004		2.8100e- 003	2.8100e- 003	 	2.5900e- 003	2.5900e- 003	0.0000	11.7741	11.7741	3.7300e- 003	0.0000	11.8674
Paving	1.9700e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.1500e- 003	0.0586	0.0883	1.4000e- 004		2.8100e- 003	2.8100e- 003		2.5900e- 003	2.5900e- 003	0.0000	11.7741	11.7741	3.7300e- 003	0.0000	11.8674

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
Worker	4.2000e- 004	3.0000e- 004	3.9300e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0676	1.0676	3.0000e- 005	3.0000e- 005	1.0766
Total	4.2000e- 004	3.0000e- 004	3.9300e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0676	1.0676	3.0000e- 005	3.0000e- 005	1.0766

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

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		tons/yr											MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954 ppendix B Pa	ige 102 ⁴⁸³⁰

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.0557	4.0557	3.4000e- 004	4.0000e- 005	4.0766
Electricity Unmitigated		 	,	1		0.0000	0.0000	1	0.0000	0.0000	0.0000	4.0557	4.0557	3.4000e- 004	4.0000e- 005	4.0766
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000	1	0.0000	0.0000	η ! ! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000	,	0.0000	0.0000	 : : :	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	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					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	i i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Parking Lot	22869	4.0557	3.4000e- 004	4.0000e- 005	4.0766
Total		4.0557	3.4000e- 004	4.0000e- 005	4.0766

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Parking Lot	22869	4.0557	3.4000e- 004	4.0000e- 005	4.0766
Total		4.0557	3.4000e- 004	4.0000e- 005	4.0766

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

	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	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005
Unmitigated	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000	i i	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Coating	9.1000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Donation 1	4.2200e- 003					0.0000	0.0000	, 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005	
Total	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005	

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

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	9.1000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Products	4.2200e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	0.0000	0.0000	2.0000e- 005	0.0000	 	0.0000	0.0000	 	0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005	
Total	5.1300e- 003	0.0000	2.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.0000e- 005	4.0000e- 005	0.0000	0.0000	4.0000e- 005	

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

	Total CO2	CH4	N2O	CO2e	
Category	MT/yr				
		0.0000	0.0000	0.0000	
Unmitigated	0.0000	0.0000	0.0000	0.0000	

7.2 Water by Land Use Unmitigated

	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
Total		0.0000	0.0000	0.0000	0.0000

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

7.2 Water by Land Use

Mitigated

	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
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
Mitigated	. 0.0000	0.0000	0.0000	0.0000		
Unmitigated	• 0.0000	0.0000	0.0000	0.0000		

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

CalEEMod Version: CalEEMod.2020.4.0 Page 19 of 19 Date: 11/10/2022 3:37 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

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 Toron	Niconala au
Equipment Type	Number
1.1	

11.0 Vegetation

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

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32Climate Zone10Operational Year2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note R

Land Use - See Note S

Construction Phase - See Note T

Off-road Equipment - See Note U

Off-road Equipment -

Table Name	Column Name	Default Value	New Value	
tblConstructionPhase	NumDays	200.00	20.00	
tblConstructionPhase	NumDays	10.00	20.00	
tblConstructionPhase	PhaseEndDate	9/21/2023	6/28/2024	
tblConstructionPhase	PhaseEndDate	10/5/2023	6/28/2024	
tblConstructionPhase	PhaseStartDate	12/16/2022	6/3/2024	

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

tblConstructionPhase	PhaseStartDate	9/22/2023	6/3/2024
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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		
2024	2.1434	14.7693	21.5692	0.0371	0.5176	0.6272	1.1448	0.1389	0.5983	0.7371	0.0000	3,480.713 4	3,480.713 4	0.6235	0.0397	3,508.115 7
Maximum	2.1434	14.7693	21.5692	0.0371	0.5176	0.6272	1.1448	0.1389	0.5983	0.7371	0.0000	3,480.713 4	3,480.713 4	0.6235	0.0397	3,508.115 7

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		
2024	2.1434	14.7693	21.5692	0.0371	0.5176	0.6272	1.1448	0.1389	0.5983	0.7371	0.0000	3,480.713 4	3,480.713 4	0.6235	0.0397	3,508.115 7
Maximum	2.1434	14.7693	21.5692	0.0371	0.5176	0.6272	1.1448	0.1389	0.5983	0.7371	0.0000	3,480.713 4	3,480.713 4	0.6235	0.0397	3,508.115 7

CalEEMod Version: CalEEMod.2020.4.0 Page 3 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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/e	day							lb/c	day		
Area	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0281	0.0000	1.5000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000	0.0000	3.5000e- 004

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/e	day							lb/c	lay		
Area	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0281	0.0000	1.5000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000	0.0000	3.5000e- 004

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	Building Construction	Building Construction	6/3/2024	6/28/2024	5	20	
2	Paving	Paving	6/3/2024	6/28/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	6	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

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					lb/d	day							lb/c	lay		
Off-Road	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342		1,582.815 9	1,582.815 9	0.1979		1,587.762 1
Total	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342		1,582.815 9	1,582.815 9	0.1979		1,587.762 1

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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 Building Construction - 2024 <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					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	0.0126	0.3893	0.1592	1.9400e- 003	0.0705	2.8500e- 003	0.0733	0.0203	2.7300e- 003	0.0230		208.2018	208.2018	5.3500e- 003	0.0307	217.4966
Worker	0.0980	0.0565	0.9440	2.6200e- 003	0.3018	1.4300e- 003	0.3032	0.0800	1.3100e- 003	0.0814		264.4831	264.4831	5.9600e- 003	6.0100e- 003	266.4241
Total	0.1106	0.4458	1.1033	4.5600e- 003	0.3723	4.2800e- 003	0.3766	0.1003	4.0400e- 003	0.1044		472.6849	472.6849	0.0113	0.0368	483.9206

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	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342	0.0000	1,582.815 9	1,582.815 9	0.1979		1,587.762 1
Total	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342	0.0000	1,582.815 9	1,582.815 9	0.1979		1,587.762 1

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.0126	0.3893	0.1592	1.9400e- 003	0.0705	2.8500e- 003	0.0733	0.0203	2.7300e- 003	0.0230		208.2018	208.2018	5.3500e- 003	0.0307	217.4966
Worker	0.0980	0.0565	0.9440	2.6200e- 003	0.3018	1.4300e- 003	0.3032	0.0800	1.3100e- 003	0.0814		264.4831	264.4831	5.9600e- 003	6.0100e- 003	266.4241
Total	0.1106	0.4458	1.1033	4.5600e- 003	0.3723	4.2800e- 003	0.3766	0.1003	4.0400e- 003	0.1044		472.6849	472.6849	0.0113	0.0368	483.9206

3.3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1965		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8145	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.0472	0.0272	0.4545	1.2600e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		127.3437	127.3437	2.8700e- 003	2.9000e- 003	128.2782
Total	0.0472	0.0272	0.4545	1.2600e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		127.3437	127.3437	2.8700e- 003	2.9000e- 003	128.2782

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		
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1965					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8145	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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 Paving - 2024

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	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	0.0472	0.0272	0.4545	1.2600e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		127.3437	127.3437	2.8700e- 003	2.9000e- 003	128.2782
Total	0.0472	0.0272	0.4545	1.2600e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		127.3437	127.3437	2.8700e- 003	2.9000e- 003	128.2782

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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	CO	SO2	Fugitive PM10	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		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076 A	0.000954 ppendix B Pa	0.004830 ge 122

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

5.0 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/d	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

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/d	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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	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									
Mitigated	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day					lb/day					
Coating	4.9800e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Products	0.0231		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landocaping	1.0000e- 005	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Total	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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	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/day lb/day															
Coating	4.9800e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0231		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landocaping	1.0000e- 005	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Total	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 16 Date: 11/10/2022 3:40 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - 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

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Davs/Year	Horse Power	Load Factor	Fuel Type
1.1			.,			71

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32

Climate Zone 10 Operational Year 2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note R

Land Use - See Note S

Construction Phase - See Note T

Off-road Equipment - See Note U

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	20.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	9/21/2023	6/28/2024
tblConstructionPhase	PhaseEndDate	10/5/2023	6/28/2024
tblConstructionPhase	PhaseStartDate	12/16/2022	6/3/2024

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

tblConstructionPhase	PhaseStartDate	9/22/2023	6/3/2024
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

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/d	day		
2024	2.1375	14.7954	21.3280	0.0367	0.5176	0.6273	1.1448	0.1389	0.5983	0.7372	0.0000	3,444.461 4	3,444.461 4	0.6235	0.0400	3,471.975 9
Maximum	2.1375	14.7954	21.3280	0.0367	0.5176	0.6273	1.1448	0.1389	0.5983	0.7372	0.0000	3,444.461 4	3,444.461 4	0.6235	0.0400	3,471.975 9

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2024	2.1375	14.7954	21.3280	0.0367	0.5176	0.6273	1.1448	0.1389	0.5983	0.7372	0.0000	3,444.461 4	3,444.461 4	0.6235	0.0400	3,471.975 9
Maximum	2.1375	14.7954	21.3280	0.0367	0.5176	0.6273	1.1448	0.1389	0.5983	0.7372	0.0000	3,444.461 4	3,444.461 4	0.6235	0.0400	3,471.975 9

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

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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/c	day		
Area	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0281	0.0000	1.5000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000	0.0000	3.5000e- 004

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/d	day							lb/d	lay		
Area	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Energy	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0281	0.0000	1.5000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000	0.0000	3.5000e- 004

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	Building Construction	Building Construction	6/3/2024	6/28/2024	5	20	
2	Paving	Paving	6/3/2024	6/28/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

Building Construction	Welders	3	8.00	46	0.45
	_				

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	6	27.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342		1,582.815 9	1,582.815 9	0.1979		1,587.762 1
Total	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342		1,582.815 9	1,582.815 9	0.1979		1,587.762 1

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

3.2 Building Construction - 2024 <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					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	0.0117	0.4111	0.1642	1.9500e- 003	0.0705	2.8700e- 003	0.0733	0.0203	2.7400e- 003	0.0230		208.7107	208.7107	5.3100e- 003	0.0308	218.0326
Worker	0.0946	0.0594	0.7779	2.3700e- 003	0.3018	1.4300e- 003	0.3032	0.0800	1.3100e- 003	0.0814		239.6696	239.6696	5.9800e- 003	6.2000e- 003	241.6680
Total	0.1063	0.4705	0.9420	4.3200e- 003	0.3723	4.3000e- 003	0.3766	0.1003	4.0500e- 003	0.1044		448.3802	448.3802	0.0113	0.0370	459.7005

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	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342	0.0000	1,582.815 9	1,582.815 9	0.1979		1,587.762 1
Total	1.1712	8.4356	11.1862	0.0177		0.3412	0.3412		0.3342	0.3342	0.0000	1,582.815 9	1,582.815 9	0.1979		1,587.762 1

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

3.2 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.0117	0.4111	0.1642	1.9500e- 003	0.0705	2.8700e- 003	0.0733	0.0203	2.7400e- 003	0.0230		208.7107	208.7107	5.3100e- 003	0.0308	218.0326
Worker	0.0946	0.0594	0.7779	2.3700e- 003	0.3018	1.4300e- 003	0.3032	0.0800	1.3100e- 003	0.0814		239.6696	239.6696	5.9800e- 003	6.2000e- 003	241.6680
Total	0.1063	0.4705	0.9420	4.3200e- 003	0.3723	4.3000e- 003	0.3766	0.1003	4.0500e- 003	0.1044		448.3802	448.3802	0.0113	0.0370	459.7005

3.3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1965		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8145	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594		1,297.868 8	1,297.868 8	0.4114		1,308.154 7

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

3.3 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.0456	0.0286	0.3745	1.1400e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		115.3965	115.3965	2.8800e- 003	2.9900e- 003	116.3586
Total	0.0456	0.0286	0.3745	1.1400e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		115.3965	115.3965	2.8800e- 003	2.9900e- 003	116.3586

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	0.6180	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7
Paving	0.1965					0.0000	0.0000		0.0000	0.0000			0.0000		; : : :	0.0000
Total	0.8145	5.8607	8.8253	0.0136		0.2810	0.2810		0.2594	0.2594	0.0000	1,297.868 8	1,297.868 8	0.4114		1,308.154 7

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

3.3 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/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	0.0456	0.0286	0.3745	1.1400e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		115.3965	115.3965	2.8800e- 003	2.9900e- 003	116.3586
Total	0.0456	0.0286	0.3745	1.1400e- 003	0.1453	6.9000e- 004	0.1460	0.0385	6.3000e- 004	0.0392		115.3965	115.3965	2.8800e- 003	2.9900e- 003	116.3586

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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		

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076 A	0.000954 ppendix B Pa	0.004830 age 138

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/d	lay		
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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/d	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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

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/d	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
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	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							
Mitigated	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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/day								lb/day							
0	4.9800e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Products	0.0231		1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e- 005	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Total	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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	lb/day								lb/day							
Coating	4.9800e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0231		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landocaping	1.0000e- 005	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004
Total	0.0281	0.0000	1.5000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		3.3000e- 004	3.3000e- 004	0.0000		3.5000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 16 Date: 11/10/2022 3:41 PM

5780.0001 Lilac and Santa Ana Warehouse Project - Off-site Improvements - San Bernardino-South Coast County, Winter

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

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 32

Climate Zone 10 **Operational Year** 2024

Utility Company Southern California Edison

CO2 Intensity CH4 Intensity N2O Intensity 0.004 390.98 0.033 (lb/MWhr) (lb/MWhr)

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note O

Land Use - See Note O

Construction Phase - See Note O

Off-road Equipment - See Note O

Vehicle Trips - See Note P

Fleet Mix - See Note Q

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

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

tblConstructionPhase	PhaseEndDate	7/25/2024	6/28/2024
L			
tblFleetMix	HHD	0.02	1.00
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	7.1040e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TL	6.90	38.95
tblVehicleTrips	CW_TL	16.60	43.80
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	1.74	0.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.00
-			

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

tblVehicleTrips	SU_TR	1.74	0.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	1.74	0.71

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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		
2024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	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					ton	s/yr							MT	/yr		
2024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

	Highest	

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					ton	s/yr							MT	/yr		
Area	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Energy	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	178.8824	178.8824	0.0130	2.1000e- 003	179.8310
Mobile	0.1305	8.4073	1.8988	0.0427	1.3738	0.0904	1.4642	0.3772	0.0865	0.4637	0.0000	4,218.863 9	4,218.863 9	0.1798	0.6688	4,422.657 8
Waste	 		1			0.0000	0.0000		0.0000	0.0000	57.4505	0.0000	57.4505	3.3952	0.0000	142.3312
Water	 		1			0.0000	0.0000	,	0.0000	0.0000	21.9640	165.3642	187.3282	2.2699	0.0550	260.4527
Total	1.3794	8.4375	1.9281	0.0428	1.3738	0.0927	1.4665	0.3772	0.0888	0.4660	79.4145	4,563.118 1	4,642.532 6	5.8579	0.7259	5,005.280 7

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

2.2 Overall Operational

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					ton	ıs/yr							MT	/yr		
Area	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Energy	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	178.8824	178.8824	0.0130	2.1000e- 003	179.8310
Mobile	0.1305	8.4073	1.8988	0.0427	1.3738	0.0904	1.4642	0.3772	0.0865	0.4637	0.0000	4,218.863 9	4,218.863 9	0.1798	0.6688	4,422.657 8
Waste	7, 11 11 11	,	1 1 1		 	0.0000	0.0000		0.0000	0.0000	57.4505	0.0000	57.4505	3.3952	0.0000	142.3312
Water	p ₁	y : : :	1	,		0.0000	0.0000		0.0000	0.0000	21.9640	165.3642	187.3282	2.2699	0.0550	260.4527
Total	1.3794	8.4375	1.9281	0.0428	1.3738	0.0927	1.4665	0.3772	0.0888	0.4660	79.4145	4,563.118 1	4,642.532 6	5.8579	0.7259	5,005.280 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	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/28/2024	6/28/2024	5	1	

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

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural

Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

3.2 **Demolition - 2024**

Unmitigated Construction On-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

3.2 **Demolition - 2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.1305	8.4073	1.8988	0.0427	1.3738	0.0904	1.4642	0.3772	0.0865	0.4637	0.0000	4,218.863 9	4,218.863 9	0.1798	0.6688	4,422.657 8
Unmitigated	0.1305	8.4073	1.8988	0.0427	1.3738	0.0904	1.4642	0.3772	0.0865	0.4637	0.0000	4,218.863 9	4,218.863 9	0.1798	0.6688	4,422.657 8

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	209.92	209.92	209.92	3,194,793	3,194,793
Total	209.92	209.92	209.92	3,194,793	3,194,793

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	43.80	8.40	38.95	59.00	0.00	41.00	100	0	0

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	146.0663	146.0663	0.0123	1.4900e- 003	146.8199
Electricity Unmitigated	,		 			0.0000	0.0000	 	0.0000	0.0000	0.0000	146.0663	146.0663	0.0123	1.4900e- 003	146.8199
NaturalGas Mitigated	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003	 	2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.3000e- 004	6.0000e- 004	33.0111
NaturalGas Unmitigated	3.3200e- 003	0.0301	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.3000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	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					ton	s/yr							MT	⁻ /yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	24010	1.3000e- 004	1.1800e- 003	9.9000e- 004	1.0000e- 005	 	9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2813	1.2813	2.0000e- 005	2.0000e- 005	1.2889
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	1	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	590940	3.1900e- 003	0.0290	0.0243	1.7000e- 004		2.2000e- 003	2.2000e- 003		2.2000e- 003	2.2000e- 003	0.0000	31.5348	31.5348	6.0000e- 004	5.8000e- 004	31.7222
Total		3.3200e- 003	0.0302	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.2000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

5.2 Energy by Land Use - NaturalGas

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		tons/yr									MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	24010	1.3000e- 004	1.1800e- 003	9.9000e- 004	1.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	1.2813	1.2813	2.0000e- 005	2.0000e- 005	1.2889
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	590940	3.1900e- 003	0.0290	0.0243	1.7000e- 004		2.2000e- 003	2.2000e- 003		2.2000e- 003	2.2000e- 003	0.0000	31.5348	31.5348	6.0000e- 004	5.8000e- 004	31.7222
Total		3.3200e- 003	0.0302	0.0253	1.8000e- 004		2.2900e- 003	2.2900e- 003		2.2900e- 003	2.2900e- 003	0.0000	32.8161	32.8161	6.2000e- 004	6.0000e- 004	33.0111

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	64330	11.4086	9.6000e- 004	1.2000e- 004	11.4675
Parking Lot	77215.6	13.6938	1.1600e- 003	1.4000e- 004	13.7645
Unrefrigerated Warehouse-No Rail	682080	120.9639	0.0102	1.2400e- 003	121.5879
Total		146.0663	0.0123	1.5000e- 003	146.8199

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>Mitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000			
General Office Building	64330	11.4086	9.6000e- 004	1.2000e- 004	11.4675			
Parking Lot	77215.6	13.6938	1.1600e- 003	1.4000e- 004	13.7645			
Unrefrigerated Warehouse-No Rail	682080	120.9639	0.0102	1.2400e- 003	121.5879			
Total		146.0663	0.0123	1.5000e- 003	146.8199			

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 16 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

	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	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Unmitigated	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr MT/y							/yr								
Architectural Coating	0.1426					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	1.1026				 	0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e- 004	4.0000e- 005	3.9200e- 003	0.0000	 	1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Total	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

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						
Architectural Coating	ii i					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1.1026	 			 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.6000e- 004	4.0000e- 005	3.9200e- 003	0.0000	 	1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003
Total	1.2456	4.0000e- 005	3.9200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	7.6400e- 003	7.6400e- 003	2.0000e- 005	0.0000	8.1400e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 18 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

	Total CO2	CH4	N2O	CO2e				
Category	MT/yr							
willigatou	187.3282	2.2699	0.0550	260.4527				
Ommigatou	187.3282	2.2699	0.0550	260.4527				

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
City Park	0 / 2.02552	3.9909	3.4000e- 004	4.0000e- 005	4.0115		
General Office Building	1.24414 / 0.762535	4.7701	0.0409	1.0000e- 003	6.0915		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Unrefrigerated Warehouse-No Rail	67.9875 / 0	178.5671	2.2286	0.0539	250.3497		
Total		187.3282	2.2699	0.0550	260.4527		

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	MT/yr						
City Park	0 / 2.02552	3.9909	3.4000e- 004	4.0000e- 005	4.0115			
General Office Building	1.24414 / 0.762535	4.7701	0.0409	1.0000e- 003	6.0915			
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	67.9875 / 0	178.5671	2.2286	0.0539	250.3497			
Total		187.3282	2.2699	0.0550	260.4527			

8.0 Waste Detail

8.1 Mitigation Measures Waste

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							
Mitigated	. 07.1000	3.3952	0.0000	142.3312				
Unmitigated	ı 07.1000	3.3952	0.0000	142.3312				

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

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
City Park	0.15	0.0305	1.8000e- 003	0.0000	0.0754			
General Office Building	6.51	1.3215	0.0781	0.0000	3.2739			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	276.36	56.0986	3.3153	0.0000	138.9819			
Total		57.4505	3.3952	0.0000	142.3312			

Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
City Park	0.15	0.0305	1.8000e- 003	0.0000	0.0754			
General Office Building	6.51	1.3215	0.0781	0.0000	3.2739			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Unrefrigerated Warehouse-No Rail	276.36	56.0986	3.3153	0.0000	138.9819			
Total		57.4505	3.3952	0.0000	142.3312			

9.0 Operational Offroad

F 1 1 T	N1 1	11 /5	5 1/			E 17
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

CalEEMod Version: CalEEMod.2020.4.0 Page 22 of 22 Date: 11/11/2022 12:03 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

Equipment Type Number

11.0 Vegetation

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

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Climate Zone

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32

Operational Year 2024

Utility Company Southern California Edison

10

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note O

Land Use - See Note O

Construction Phase - See Note O

Off-road Equipment - See Note O

Vehicle Trips - See Note P

Fleet Mix - See Note Q

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00

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

tblConstructionPhase	PhaseEndDate	7/25/2024	6/28/2024
tblFleetMix	HHD	0.02	1.00
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	7.1040e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TL	6.90	38.95
tblVehicleTrips	CW_TL	16.60	43.80
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	1.74	0.71
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.00

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

tblVehicleTrips	SU_TR	1.74	0.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	1.74	0.71

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	lb/day											lb/day					
2024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	lb/day											lb/day					
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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/e			lb/d	lay							
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.7324	43.6457	10.3969	0.2346	7.6755	0.4972	8.1727	2.1038	0.4757	2.5795		25,574.58 40	25,574.58 40	1.0910	4.0541	26,809.98 90
Total	7.5764	43.8111	10.5670	0.2355	7.6755	0.5099	8.1853	2.1038	0.4883	2.5922		25,772.86 25	25,772.86 25	1.0950	4.0578	27,009.44 98

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/e				lb/d	lay						
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.7324	43.6457	10.3969	0.2346	7.6755	0.4972	8.1727	2.1038	0.4757	2.5795		25,574.58 40	25,574.58 40	1.0910	4.0541	26,809.98 90
Total	7.5764	43.8111	10.5670	0.2355	7.6755	0.5099	8.1853	2.1038	0.4883	2.5922		25,772.86 25	25,772.86 25	1.0950	4.0578	27,009.44 98

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	6/28/2024	6/28/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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 - 2024**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/d	lay							
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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 - 2024**

Mitigated Construction On-Site

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

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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

4.1 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			lb/c	lay							
Mitigated	0.7324	43.6457	10.3969	0.2346	7.6755	0.4972	8.1727	2.1038	0.4757	2.5795		25,574.58 40	25,574.58 40	1.0910	4.0541	26,809.98 90
Unmitigated	0.7324	43.6457	10.3969	0.2346	7.6755	0.4972	8.1727	2.1038	0.4757	2.5795		25,574.58 40	25,574.58 40	1.0910	4.0541	26,809.98 90

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	209.92	209.92	209.92	3,194,793	3,194,793
Total	209.92	209.92	209.92	3,194,793	3,194,793

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	43.80	8.40	38.95	59.00	0.00	41.00	100	0	0

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	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/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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	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/day											lb/day							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000				
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849				
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041				
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890				

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

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/day											lb/day							
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000				
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849				
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041				
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890				

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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	N2O	CO2e		
Category		lb/day										lb/day						
Mitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718		
Unmitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004	1	1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004	i i	0.0718		

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/day											lb/day						
Architectural Coating	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718		
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718		

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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	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	lb/day													
Architectural Coating	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 15 Date: 11/11/2022 12:01 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - 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

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Climate Zone

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32

Operational Year 2024

Utility Company Southern California Edison

10

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note O

Land Use - See Note O

Construction Phase - See Note O

Off-road Equipment - See Note O

Vehicle Trips - See Note P

Fleet Mix - See Note Q

Table Name	Column Name	Default Value	New Value		
tblConstructionPhase	NumDays	20.00	1.00		

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

tblConstructionPhase	PhaseEndDate	7/25/2024	6/28/2024		
L					
tblFleetMix	HHD	0.02	1.00		
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	7.1040e-003	0.00		
tblFleetMix	MCY	0.03	0.00		
tblFleetMix	MDV	0.14	0.00		
tblFleetMix	MH	4.8300e-003	0.00		
tblFleetMix	MHD	0.01	0.00		
tblFleetMix	OBUS	5.5400e-004	0.00		
tblFleetMix	SBUS	9.5400e-004	0.00		
tblFleetMix	UBUS	2.5100e-004	0.00		
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00		
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00		
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00		
tblVehicleTrips	CNW_TL	6.90	38.95		
tblVehicleTrips	CW_TL	16.60	43.80		
tblVehicleTrips	DV_TP	5.00	0.00		
tblVehicleTrips	PB_TP	3.00	0.00		
tblVehicleTrips	PR_TP	92.00	100.00		
tblVehicleTrips	ST_TR	1.96	0.00		
tblVehicleTrips	ST_TR	2.21	0.00		
tblVehicleTrips	ST_TR	1.74	0.71		
tblVehicleTrips	SU_TR	2.19	0.00		
tblVehicleTrips	SU_TR	0.70	0.00		
-					

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

tblVehicleTrips	SU_TR	1.74	0.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	1.74	0.71

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	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/day									lb/day						
2024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.6943	45.8526	10.5207	0.2347	7.6755	0.4976	8.1731	2.1038	0.4761	2.5799		25,593.77 45	25,593.77 45	1.0891	4.0572	26,830.04 74
Total	7.5384	46.0181	10.6908	0.2357	7.6755	0.5102	8.1857	2.1038	0.4887	2.5925		25,792.05 30	25,792.05 30	1.0931	4.0608	27,029.50 81

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.6943	45.8526	10.5207	0.2347	7.6755	0.4976	8.1731	2.1038	0.4761	2.5799		25,593.77 45	25,593.77 45	1.0891	4.0572	26,830.04 74
Total	7.5384	46.0181	10.6908	0.2357	7.6755	0.5102	8.1857	2.1038	0.4887	2.5925		25,792.05 30	25,792.05 30	1.0931	4.0608	27,029.50 81

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	6/28/2024	6/28/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

3.2 **Demolition - 2024**

Unmitigated Construction On-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

3.2 **Demolition - 2024**

Mitigated Construction On-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

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	0.6943	45.8526	10.5207	0.2347	7.6755	0.4976	8.1731	2.1038	0.4761	2.5799		25,593.77 45	25,593.77 45	1.0891	4.0572	26,830.04 74
Unmitigated	0.6943	45.8526	10.5207	0.2347	7.6755	0.4976	8.1731	2.1038	0.4761	2.5799		25,593.77 45	25,593.77 45	1.0891	4.0572	26,830.04 74

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	209.92	209.92	209.92	3,194,793	3,194,793
Total	209.92	209.92	209.92	3,194,793	3,194,793

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	43.80	8.40	38.95	59.00	0.00	41.00	100	0	0

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	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/d	lay		
	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126	 	0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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 <u>Unmitigated</u>

	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/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005	 	4.9000e- 004	4.9000e- 004	 	4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

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	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/d	lay		
Mitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.8259	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004	i i	1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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									day							
Architectural Coating	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 15 Date: 11/11/2022 12:02 AM

5780.0001 Lilac and Santa Ana Warehouse - Truck Trips - San Bernardino-South Coast County, Winter

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

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

CalEEMod Version: CalEEMod.2020.4.0 Page 1 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32Climate Zone10Operational Year2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Localized Assessment Scenario - On-site Localized Operational Emissions Only

Land Use - See Note B

Construction Phase - Operational run only - zeroed out construction only parameters

Off-road Equipment - Operational run only

Trips and VMT - See Note F

Demolition - See Note E

Grading - See Note D

Architectural Coating - See Note G

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

Vehicle Trips - Localized assessment scenario - adjusted trip lengths to 0.5 mile to account for on-site and localized emissions only

Area Coating - See Note J

Construction Off-road Equipment Mitigation -

Area Mitigation - See Note N

Operational Off-Road Equipment - See Note K

Fleet Mix - See Note I

Stationary Sources - Emergency Generators and Fire Pumps - See Note L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	10.00
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CW_TL	16.60	0.50
tblVehicleTrips	CW_TL	16.60	0.50

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.73
tblVehicleTrips	ST_TR	1.74	1.73
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	1.73
tblVehicleTrips	SU_TR	1.74	1.73
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	1.73
tblVehicleTrips	WD_TR	1.74	1.73

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	CO	SO2	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			lb/c	lay							
	1,426.007 1	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	504.5056	504.5056	0.0122	0.0120	508.3903
Maximum	1,426.007 1	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	504.5056	504.5056	0.0122	0.0120	508.3903

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	1,426.007 1	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	504.5056	504.5056	0.0122	0.0120	508.3903
Maximum	1,426.007 1	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	504.5056	504.5056	0.0122	0.0120	508.3903

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	CO	SO2	Fugitive PM10	Exhaust PM10	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	day		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	1.0243	0.5352	3.2037	2.8400e- 003	0.2001	3.4400e- 003	0.2036	0.0534	3.2000e- 003	0.0566		290.3042	290.3042	0.0634	0.0400	303.8202
Offroad	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423	,	0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	7.7649	1.5034	4.1061	5.2100e- 003	0.2001	0.0584	0.2585	0.0534	0.0581	0.1115	0.0000	635.4976	635.4976	0.0880	0.0437	650.7109

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

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/e	day							lb/c	lay		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	1.0243	0.5352	3.2037	2.8400e- 003	0.2001	3.4400e- 003	0.2036	0.0534	3.2000e- 003	0.0566		290.3042	290.3042	0.0634	0.0400	303.8202
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	7.7649	1.5034	4.1061	5.2100e- 003	0.2001	0.0584	0.2585	0.0534	0.0581	0.1115	0.0000	635.4976	635.4976	0.0880	0.0437	650.7109

	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 Numbe		Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/3/2023	7/3/2023	5	1	

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 451,500; Non-Residential Outdoor: 150,500; Striped Parking Area: 13,237 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 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					lb/d	day							lb/d	day		
Archit. Coating	1,425.811 8					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1,425.811 8	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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 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					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	0.1954	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		504.5056	504.5056	0.0122	0.0120	508.3903
Total	0.1954	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		504.5056	504.5056	0.0122	0.0120	508.3903

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		
Archit. Coating	1,425.811 8					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	;	0.0000
Total	1,425.811 8	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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 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					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	0.1954	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		504.5056	504.5056	0.0122	0.0120	508.3903
Total	0.1954	0.1179	1.8805	4.9900e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		504.5056	504.5056	0.0122	0.0120	508.3903

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	N2O	CO2e
Category					lb/	day							lb/d	day		
Mitigated	1.0243	0.5352	3.2037	2.8400e- 003	0.2001	3.4400e- 003	0.2036	0.0534	3.2000e- 003	0.0566		290.3042	290.3042	0.0634	0.0400	303.8202
Unmitigated	1.0243	0.5352	3.2037	2.8400e- 003	0.2001	3.4400e- 003	0.2036	0.0534	3.2000e- 003	0.0566		290.3042	290.3042	0.0634	0.0400	303.8202

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	12.11	12.11	12.11	2,204	2,204
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	508.62	508.62	508.62	92,569	92,569
Total	520.73	520.73	520.73	94,773	94,773

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	0.50	0.50	0.50	33.00	48.00	19.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.50	0.50	0.50	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

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/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	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	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

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/d	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Mitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 17 Date: 11/18/2022 10:15 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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	lb/day							lb/day								
	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	10	8.00	260	89	0.20	Electrical

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

UnMitigated/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
Equipment Type	lb/day								lb/day							
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.5	6	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - 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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day							lb/day								
Fire Pump - Diesel (300 - 600 HP)	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299

11.0 Vegetation

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)32Climate Zone10Operational Year2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Localized Assessment Scenario - On-site Localized Operational Emissions Only

Land Use - See Note B

Construction Phase - Operational run only - zeroed out construction only parameters

Off-road Equipment - Operational run only

Trips and VMT - See Note F

Demolition - See Note E

Grading - See Note D

Architectural Coating - See Note G

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

Vehicle Trips - Localized assessment scenario - adjusted trip lengths to 0.5 mile to account for on-site and localized emissions only

Area Coating - See Note J

Construction Off-road Equipment Mitigation -

Area Mitigation - See Note N

Operational Off-Road Equipment - See Note K

Fleet Mix - See Note I

Stationary Sources - Emergency Generators and Fire Pumps - See Note L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	1.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	10.00
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CW_TL	16.60	0.50
tblVehicleTrips	CW_TL	16.60	0.50

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.73
tblVehicleTrips	ST_TR	1.74	1.73
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	1.73
tblVehicleTrips	SU_TR	1.74	1.73
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	1.73
tblVehicleTrips	WD_TR	1.74	1.73

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	1,426.000 0	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	457.0719	457.0719	0.0122	0.0124	461.0720
Maximum	1,426.000 0	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	457.0719	457.0719	0.0122	0.0124	461.0720

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
	1,426.000 0	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	457.0719	457.0719	0.0122	0.0124	461.0720
Maximum	1,426.000 0	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508	0.0000	457.0719	457.0719	0.0122	0.0124	461.0720

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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	day		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004	 	0.0126	0.0126	i i i	0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.8158	0.5701	3.4766	2.7100e- 003	0.2001	3.4600e- 003	0.2036	0.0534	3.2100e- 003	0.0566		277.1876	277.1876	0.0719	0.0415	291.3553
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	7.5564	1.5383	4.3790	5.0800e- 003	0.2001	0.0584	0.2585	0.0534	0.0581	0.1115	0.0000	622.3810	622.3810	0.0965	0.0451	638.2460

CalEEMod Version: CalEEMod.2020.4.0 Page 6 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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					lb/	day							lb/d	day		
Area	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004	 	1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004	 	0.0126	0.0126	 	0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.8158	0.5701	3.4766	2.7100e- 003	0.2001	3.4600e- 003	0.2036	0.0534	3.2100e- 003	0.0566		277.1876	277.1876	0.0719	0.0415	291.3553
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Stationary	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423	 	0.0423	0.0423		146.9150	146.9150	0.0206		147.4299
Total	7.5564	1.5383	4.3790	5.0800e- 003	0.2001	0.0584	0.2585	0.0534	0.0581	0.1115	0.0000	622.3810	622.3810	0.0965	0.0451	638.2460

	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 Numbe		Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	7/3/2023	7/3/2023	5	1	

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 451,500; Non-Residential Outdoor: 150,500; Striped Parking Area: 13,237 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Architectural Coating	0	50.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Archit. Coating	1,425.811 8					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	1,425.811 8	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

3.2 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					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	0.1882	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		457.0719	457.0719	0.0122	0.0124	461.0720
Total	0.1882	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		457.0719	457.0719	0.0122	0.0124	461.0720

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		
Archit. Coating	1,425.811 8					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	;	0.0000
Total	1,425.811 8	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

3.2 Architectural Coating - 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					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	0.1882	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		457.0719	457.0719	0.0122	0.0124	461.0720
Total	0.1882	0.1240	1.5477	4.5200e- 003	0.5589	2.7500e- 003	0.5616	0.1482	2.5300e- 003	0.1508		457.0719	457.0719	0.0122	0.0124	461.0720

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/c	day		
Mitigated	0.8158	0.5701	3.4766	2.7100e- 003	0.2001	3.4600e- 003	0.2036	0.0534	3.2100e- 003	0.0566		277.1876	277.1876	0.0719	0.0415	291.3553
Unmitigated	0.8158	0.5701	3.4766	2.7100e- 003	0.2001	3.4600e- 003	0.2036	0.0534	3.2100e- 003	0.0566		277.1876	277.1876	0.0719	0.0415	291.3553

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	12.11	12.11	12.11	2,204	2,204
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	508.62	508.62	508.62	92,569	92,569
Total	520.73	520.73	520.73	94,773	94,773

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	0.50	0.50	0.50	33.00	48.00	19.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.50	0.50	0.50	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830

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/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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 <u>Unmitigated</u>

	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/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005	 	4.9000e- 004	4.9000e- 004	 	4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

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		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/c	lay		
Mitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/d	day		
Coating	0.3906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
'	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.4353	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	10	8.00	260	89	0.20	Electrical

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

UnMitigated/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		
Equipment Type		lb/day											lb/day					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Fire Pump	1	0.5	6	350	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

CalEEMod Version: CalEEMod.2020.4.0 Page 17 of 17 Date: 11/18/2022 10:14 AM

5780.0001 Lilac and Santa Ana Warehouse Project - Localized Assessment - San Bernardino-South Coast County, Winter

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

10.1 Stationary Sources

Unmitigated/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		
Equipment Type		lb/day											lb/day					
Fire Pump - Diesel (300 - 600 HP)	. 0.2072	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299		
Total	0.2872	0.8027	0.7323	1.3800e- 003		0.0423	0.0423		0.0423	0.0423		146.9150	146.9150	0.0206		147.4299		

11.0 Vegetation

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

Truck Trips - Localized Assessment

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note O

On-site Localized Operational Emissions - Trucks Only

Land Use - See Note O

Construction Phase - See Note O

Off-road Equipment - See Note O

Vehicle Trips - See Note P

Localized assessment scenario - adjusted trip lengths to 0.5 mile to account for on-site and localized emissions only

Fleet Mix - See Note Q

Truck Trips - Localized Assessment - 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
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	1.00
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	7.1040e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CW_TL	16.60	0.50
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	1.74	0.71

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

tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	1.74	0.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	1.74	0.71

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	lb/day										lb/day						
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

Mitigated Construction

	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/day										lb/day						
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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/c	lay		
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.2896	4.6489	4.0064	8.6800e- 003	0.0913	7.1000e- 003	0.0984	0.0250	6.8000e- 003	0.0318		933.8629	933.8629	0.0280	0.1475	978.5136
Total	7.1336	4.8144	4.1765	9.6700e- 003	0.0913	0.0198	0.1110	0.0250	0.0195	0.0445		1,132.141 3	1,132.141 3	0.0319	0.1511	1,177.974 4

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.2896	4.6489	4.0064	8.6800e- 003	0.0913	7.1000e- 003	0.0984	0.0250	6.8000e- 003	0.0318		933.8629	933.8629	0.0280	0.1475	978.5136
Total	7.1336	4.8144	4.1765	9.6700e- 003	0.0913	0.0198	0.1110	0.0250	0.0195	0.0445		1,132.141 3	1,132.141 3	0.0319	0.1511	1,177.974 4

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	6/28/2024	6/28/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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 - 2024**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

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/c	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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 - 2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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

4.1 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/c	lay		
Mitigated	0.2896	4.6489	4.0064	8.6800e- 003	0.0913	7.1000e- 003	0.0984	0.0250	6.8000e- 003	0.0318		933.8629	933.8629	0.0280	0.1475	978.5136
Unmitigated	0.2896	4.6489	4.0064	8.6800e- 003	0.0913	7.1000e- 003	0.0984	0.0250	6.8000e- 003	0.0318		933.8629	933.8629	0.0280	0.1475	978.5136

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	208.74	208.74	208.74	37,991	37,991
Total	208.74	208.74	208.74	37,991	37,991

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.50	0.50	0.50	59.00	0.00	41.00	100	0	0

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	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/d	day		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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 <u>Unmitigated</u>

	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/day											lb/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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

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/day											lb/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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/day											lb/d	day		
Architectural Coating	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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	lb/day											lb/d	day			
	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
· · ·	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 15 Date: 11/18/2022 10:19 AM

Truck Trips - Localized Assessment - 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

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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

Truck Trips - Localized Assessment San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	7.00	1000sqft	0.16	7,000.00	0
Unrefrigerated Warehouse-No Rail	294.00	1000sqft	6.75	294,000.00	0
Parking Lot	5.06	Acre	5.06	220,616.00	0
City Park	1.70	Acre	1.70	74,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2024

Utility Company Southern California Edison

 CO2 Intensity
 390.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note O

On-site Localized Operational Emissions - Trucks Only

Land Use - See Note O

Construction Phase - See Note O

Off-road Equipment - See Note O

Vehicle Trips - See Note P

Localized assessment scenario - adjusted trip lengths to 0.5 mile to account for on-site and localized emissions only

Fleet Mix - See Note Q

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
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	1.00
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	7.1040e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	4.8300e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	5.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5100e-004	0.00
tblLandUse	LandUseSquareFeet	220,413.60	220,616.00
tblLandUse	LandUseSquareFeet	74,052.00	74,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CC_TL	8.40	0.50
tblVehicleTrips	CNW_TL	6.90	0.50
tblVehicleTrips	CW_TL	16.60	0.50
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	0.00
tblVehicleTrips	ST_TR	1.74	0.71

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

tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.00
tblVehicleTrips	SU_TR	1.74	0.71
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	0.00
tblVehicleTrips	WD_TR	1.74	0.71

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2020.4.0 Page 4 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

	ROG	NOx	CO	SO2	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		
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	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

CalEEMod Version: CalEEMod.2020.4.0 Page 5 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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	day		
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.2518	5.0402	4.1342	8.8600e- 003	0.0913	7.4900e- 003	0.0988	0.0250	7.1700e- 003	0.0322		952.9538	952.9538	0.0261	0.1505	998.4510
Total	7.0959	5.2056	4.3044	9.8500e- 003	0.0913	0.0202	0.1114	0.0250	0.0198	0.0448		1,151.232 2	1,151.232 2	0.0301	0.1541	1,197.911 8

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Area	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Energy	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
Mobile	0.2518	5.0402	4.1342	8.8600e- 003	0.0913	7.4900e- 003	0.0988	0.0250	7.1700e- 003	0.0322		952.9538	952.9538	0.0261	0.1505	998.4510
Total	7.0959	5.2056	4.3044	9.8500e- 003	0.0913	0.0202	0.1114	0.0250	0.0198	0.0448		1,151.232 2	1,151.232 2	0.0301	0.1541	1,197.911 8

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	6/28/2024	6/28/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2020.4.0 Page 7 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

3.2 **Demolition - 2024**

Unmitigated Construction On-Site

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

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 8 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

3.2 **Demolition - 2024**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2020.4.0 Page 9 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.2518	5.0402	4.1342	8.8600e- 003	0.0913	7.4900e- 003	0.0988	0.0250	7.1700e- 003	0.0322		952.9538	952.9538	0.0261	0.1505	998.4510
Unmitigated	0.2518	5.0402	4.1342	8.8600e- 003	0.0913	7.4900e- 003	0.0988	0.0250	7.1700e- 003	0.0322		952.9538	952.9538	0.0261	0.1505	998.4510

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	208.74	208.74	208.74	37,991	37,991
Total	208.74	208.74	208.74	37,991	37,991

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
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.50	0.50	0.50	59.00	0.00	41.00	100	0	0

CalEEMod Version: CalEEMod.2020.4.0 Page 10 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
General Office Building	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Parking Lot	0.540566	0.056059	0.172680	0.136494	0.026304	0.007104	0.011680	0.017449	0.000554	0.000251	0.025076	0.000954	0.004830
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	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/d	lay		
NaturalGas Mitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890
NaturalGas Unmitigated	0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 11 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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	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/	day							lb/d	day		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	65.7808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004	 	4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1619.01	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

CalEEMod Version: CalEEMod.2020.4.0 Page 12 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

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		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	0.0657808	7.1000e- 004	6.4500e- 003	5.4200e- 003	4.0000e- 005		4.9000e- 004	4.9000e- 004		4.9000e- 004	4.9000e- 004		7.7389	7.7389	1.5000e- 004	1.4000e- 004	7.7849
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	1.61901	0.0175	0.1587	0.1333	9.5000e- 004		0.0121	0.0121		0.0121	0.0121		190.4722	190.4722	3.6500e- 003	3.4900e- 003	191.6041
Total		0.0182	0.1652	0.1388	9.9000e- 004		0.0126	0.0126		0.0126	0.0126		198.2111	198.2111	3.8000e- 003	3.6300e- 003	199.3890

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2020.4.0 Page 13 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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					lb/d	day							lb/c	lay		
Mitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Unmitigated	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

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	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Products	6.0418					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e- 003	2.8000e- 004	0.0314	0.0000	 	1.1000e- 004	1.1000e- 004	 	1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

CalEEMod Version: CalEEMod.2020.4.0 Page 14 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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	0.7813					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	6.0418					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
'	2.9000e- 003	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718
Total	6.8259	2.8000e- 004	0.0314	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0674	0.0674	1.8000e- 004		0.0718

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2020.4.0 Page 15 of 15 Date: 11/18/2022 10:21 AM

Truck Trips - Localized Assessment - San Bernardino-South Coast County, Winter

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

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

Quality, Greennouse G	as Emissions, and Energ	ıy Analysis Report		
				A
				Appendix
			Healt	h Risk Assessmer

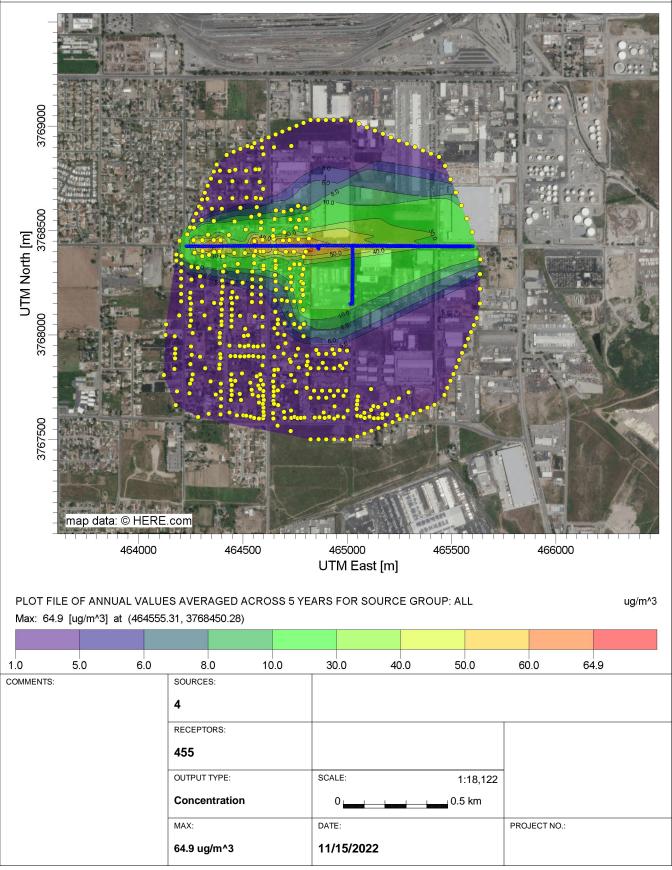


Health Risk Assessments

General Parameters

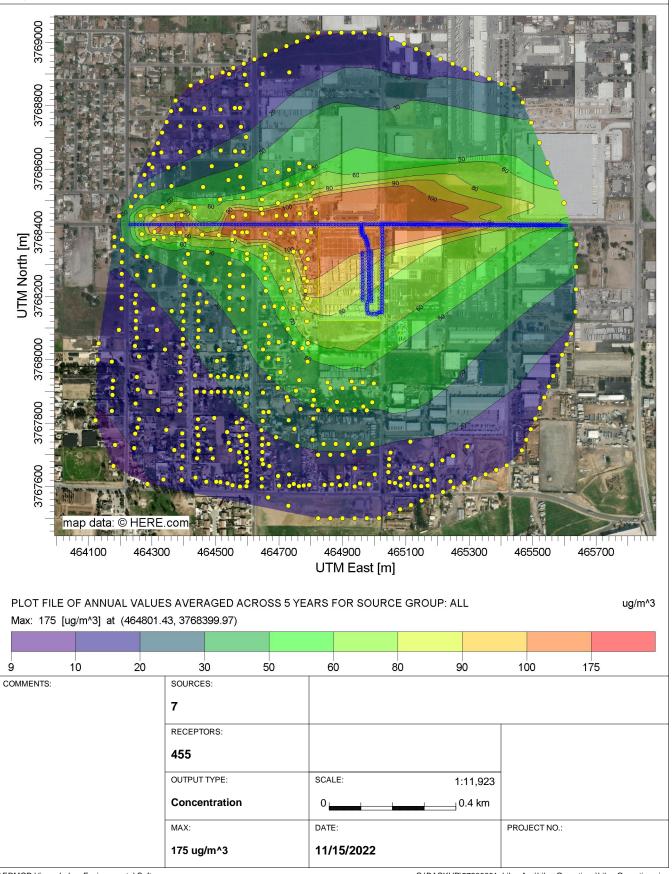
PROJECT TITLE:

Air Dispersion Trend and Graphical Representation of AERMOD Inputs Construction - Unit Emissions

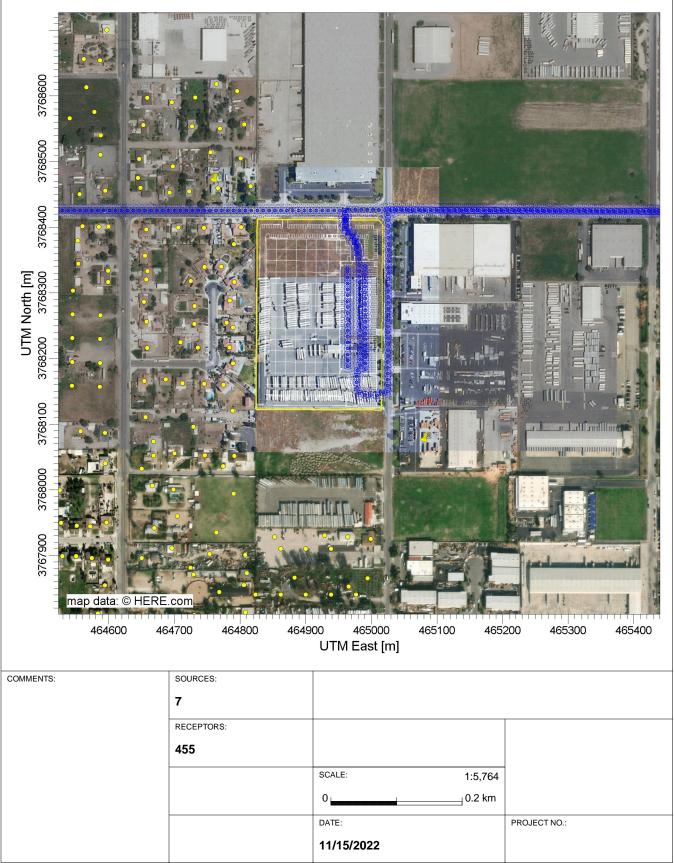


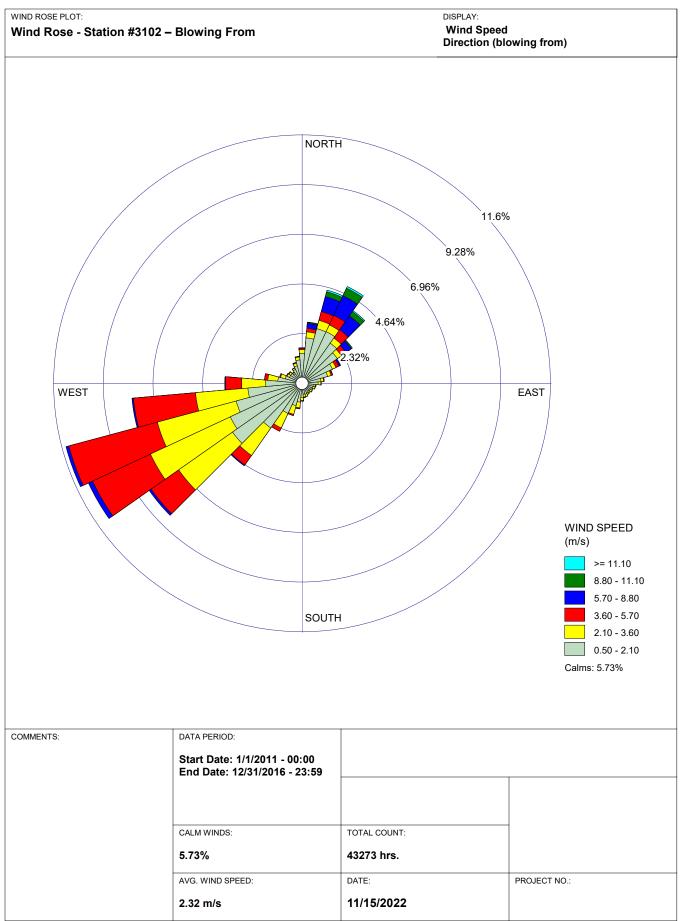
PROJECT TITLE:

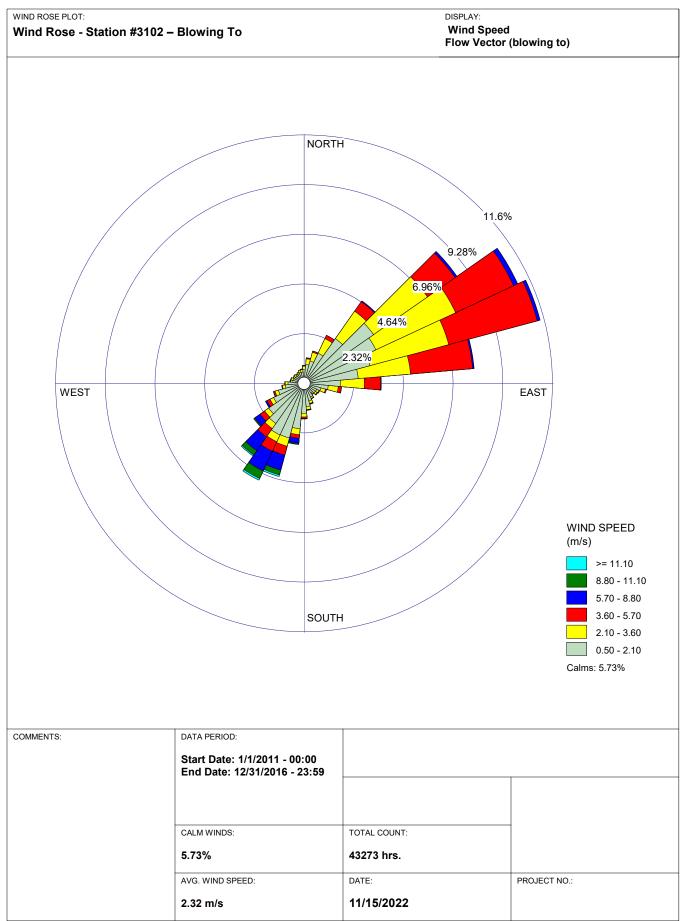
Air Dispersion Trend and Graphical Representation of AERMOD Inputs Project Operations - Unit Emissions



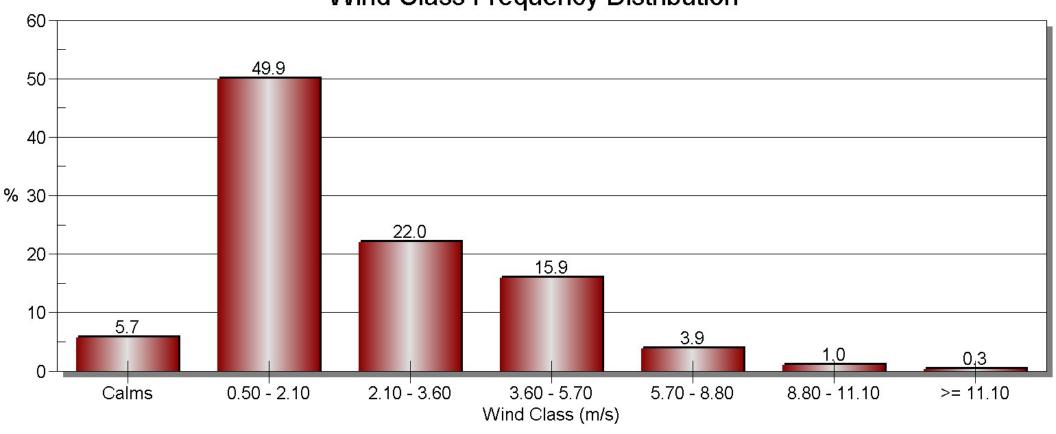
Graphical Representation of AERMOD Inputs Project Operations (Zoomed In Near the Project Site)







Wind Class Frequency Distribution



Health Risk Assessments

Construction Health Risk Assessment

5780.0001 Lilac and Santa Ana Warehouse Project

Estimation of Annual Onsite Construction Emissions (Project Site)—DPM (Exhaust PM10)

Start of Construction	7/3/2023	
End of Construction	6/28/2024	Total
Number of Days	361	361
Number of Hours	8,664	8,664

Size of the construction area source (entire site): 55,214.2 sq-meters

		Unmitigated
	On-site Construction	On-site DPM
	Activity	(tons)
2023	Demolition	0.00998
2023	Grading	0.02140
2023	Building Construction	0.02800
2024	Building Construction	0.03990
2024	Architectural Coating	0.00122
2024	Paving	0.00469
2024	Off-site Improvements - Building Construction	0.00341
2024	Off-site Improvements - Paving	0.00281

Total Unmitigated DPM (On-site) 1.114E-01 tons

Factor in AERMOD to Account for 5 days per week/8 hours per day: 4.2 1 g/s used as the unit emission in AERMOD - converted to g/s/m2 in AERMOD

Average Emission (Emissions Summary for HARP2 Inputs)	1.012E+05 grams 3.243E-03 grams/sec 5.874E-08 grams/m2-sec	
Tons/Construction Period	1.114E-01	
Pounds/Construction Period	2.228E+02	
Pounds/Day	6.172E-01	
Pounds/Hour	2.572E-02	

Years 0.989041096

2.253E+02

Pounds/Year

5780.0001 Lilac and Santa Ana Warehouse Project

Estimation of Annual Offsite Construction DPM Emissions (Project Site)

		7/2/222				
Start of Construction		7/3/2023				Tatal
End of Construction		6/28/2024				Total
Number of Days		361				361
Number of Hours		8,664				8,664
	2023	2023	2023	2024	2024	
			Building	Building	Architectural	
Construction Trip Type	Demolition	Grading	Construction	Construction	Coating	
Haul Truck	0.00040	0.00525	0.00000	0.00000	0.00000	
Vendor Truck	0.00000	0.00000	0.00104	0.00166	0.00000	
Worker	0.00001	0.00002	0.00055	0.00085	0.00005	
Total	0.00041	0.00527	0.00159	0.00251	0.00005	
		Improvements	Improvements			
	2024	2024	2024			
		Building				
	Paving	Construction	Paving			
Haul Truck	0.00000	0.00000	0.00000			
Vendor Truck	0.00000	0.00003	0.00000			
Worker	0.00001	0.00001	0.00001			
Total	0.00001	0.00004	0.00001			
	Havd Taylor	Vandou Turrele	Mouleon	Total		
	Haul Truck	Vendor Truck	Worker	Total		
Total DPM	(tons) 5.650E-03	(tons) 2.730E-03	(tons) 1.510E-03	(tons) 9.890E-03		
TOTAL DEIVI	3.030E-03	2.730E-03	1.510E-05	9.690E-05		
Average Emissions						
Grams	5.130E+03	2.479E+03	1.371E+03			
Grams/sec	1.645E-04	7.947E-05	4.396E-05			
Gramsysee	1.0432 04	7.5472 05	4.5502 05			
Default Distance	40	6.9	14.7	Vehicle Travel Di	stance Assumed i	n CalEEMod
Vehicle Travel Distances in the Co						
Road Segment 1	0.47	0.47	0.47	miles		
Road Segment 2	0.40	0.40	0.40	miles		
Road Segment 3	0.53	0.53	0.53	miles		
Additional Localized	0.25	0.25	0.25	miles		
Trip Distribution (percent)						
Off-site Road Segment 1	50.0%	50.0%	50.0%	Off-site Road Seg		
Off-site Road Segment 2	10.0%	10.0%	10.0%	Off-site Road Seg	•	
Off-site Road Segment 3	40.0%	40.0%	40.0%	Off-site Road Seg		
Additional Localized	100.0%	100.0%	100.0%		•	ncreases from idle/speed)
Percentages based on the truck to	rip distribution pr	ovided in the proje	ct-specific traffic	study (Urban Cros	sroads, 2022)	
	4 0005 00	2 2225 25	7 4765 07			
Additional Localized (g/sec)	1.028E-06	2.880E-06	7.476E-07	4.655E-06		
divided proportionally and added	to each road seg	ment				
Total Average Offsite Vehicle Em	issions Along Tra	vel Distance (a/soc	١	Total		
Road Segment 1	1.4817E-06	4.1503E-06	1.0775E-06	6.7095E-06	Off-site Road Se	agment 1
Road Segment 2	2.6861E-07	7.5239E-07		1.2163E-06	Off-site Road Se	•
Road Segment 3		3.6115E-06	1.9534E-07 9.3763E-07	5.8384E-06	Off-site Road Se	-
noau segment s	1.2893E-06	3.01136-00	9.3763E-07	J.0304E-UD	Outsite Rodu Se	gineiit 3
Average Emission (Emissions Sun	nmary for HARP?	Inputs)				
Average Emission (Emissions 3011	Grams/sec	Pounds/Hour	Pounds/Day	Pounds/year	Tons/year	Max Pounds/Hour
Road Segment 1 (Off1)	6.7095E-06	5.3251E-05	1.2780E-03	4.6137E-01	2.3068E-04	1.5975E-04
Road Segment 2 (Off2)	1.2163E-06	9.6537E-06	2.3169E-04	8.3640E-02	4.1820E-05	2.8961E-05
Road Segment 3 (Off3)		4.6337E-05	1.1121E-03	4.0147E-01	2.0073E-04	1.3901E-04
	5.8384E-06			Δ () Δ / Ε=() :	/ [][1/3E=1]/i	

Health Risk Summary - Unmitigated Construction (Summary of HARP2 Results)

Lilac and Santa Ana Warehouse Project (Unmitigated Construction)

X Y

MIR UTM 464789.20 3768247.23 0.0068

Latitude, Longitude: 34°03'15.6"N 117°22'53.5"W

Receptor # 343

^{*}HARP - HRACalc v22118 11/10/2022 4:20:47 PM - Cancer Risk - Input File: G:\BACKUP\\57800001_Lilac Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConHRAInput.hra
*HARP - HRACalc v22118 11/10/2022 4:20:47 PM - Chronic Risk - Input File: G:\BACKUP\\57800001_Lilac Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConHRAInput.hra
*HARP - HRACalc v22118 11/10/2022 4:20:47 PM - Acute Risk - Input File: G:\BACKUP\\57800001_Lilac Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConHRAInput.hra

						MAXHI	MAXHI
REC	GRP	X	Υ	RISK_SUM	SCENARIO	NonCancerChronic	Acute
1	ALL	465438.90	3768852.91	4.9692E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.59E-04	0.00E+00
2	ALL	465400.61	3768868.70	4.7719E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.37E-04	0.00E+00
3	ALL	465362.33	3768884.49	4.5203E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.08E-04	0.00E+00
4	ALL	465324.04	3768900.29	4.2152E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.74E-04	0.00E+00
5	ALL	465285.75	3768916.08	3.8840E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.37E-04	0.00E+00
6	ALL	465247.46	3768931.87	3.5467E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.99E-04	0.00E+00
7	ALL	465209.17	3768947.66	3.2189E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.62E-04	0.00E+00
8	ALL	465170.88	3768963.45	2.9179E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.28E-04	0.00E+00
9	ALL	465132.59	3768979.24	2.6393E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.97E-04	0.00E+00
10	ALL	465094.30	3768995.03	2.3950E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.69E-04	0.00E+00
11	ALL	465056.01	3769010.82	2.1578E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.43E-04	0.00E+00
12	ALL	465017.72	3769026.61	1.9378E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.18E-04	0.00E+00
13	ALL	465598.49	3768493.26	7.2679E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.17E-04	0.00E+00
14	ALL	465572.55	3768556.60	7.5866E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.53E-04	0.00E+00
15	ALL	465546.61	3768619.94	7.5618E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.50E-04	0.00E+00
16	ALL	465520.67	3768683.27	7.1424E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.03E-04	0.00E+00
17	ALL	465494.73	3768746.61	6.4439E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.25E-04	0.00E+00
18	ALL	465468.80	3768809.95	5.5678E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.26E-04	0.00E+00
19	ALL	465637.12	3768362.88	5.5466E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.24E-04	0.00E+00
20	ALL	465636.55	3768292.11	4.7188E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.31E-04	0.00E+00
21	ALL	465635.99	3768221.35	3.8502E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.33E-04	0.00E+00
22	ALL	465635.42	3768150.58	3.0456E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.43E-04	0.00E+00
23	ALL	464999.28	3767925.00	8.2561E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.28E-04	0.00E+00
24	ALL	464938.54	3767910.15	9.4149E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-03	0.00E+00
25	ALL	464900.24	3767910.15	1.0517E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.18E-03	0.00E+00
26	ALL	464861.93	3767910.15	1.1384E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.28E-03	0.00E+00
27	ALL	464807.65	3767900.62	1.1337E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.27E-03	0.00E+00
28	ALL	464976.85	3767840.15	5.8126E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.54E-04	0.00E+00
29	ALL	464938.54	3767840.15	6.4820E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.29E-04	0.00E+00
30	ALL	464900.24	3767840.15	7.1561E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.05E-04	0.00E+00
31	ALL	464861.93	3767840.15	7.7599E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.73E-04	0.00E+00
32	ALL	464823.62	3767840.15	8.2298E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.25E-04	0.00E+00
33	ALL	464994.12	3767733.63	3.7258E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.19E-04	0.00E+00
34	ALL	464955.82	3767733.63	4.0594E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.57E-04	0.00E+00
35	ALL	464917.51	3767733.63	4.4120E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	4.96E-04	0.00E+00
36	ALL	464879.20	3767733.63	4.7736E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.37E-04	0.00E+00
37	ALL	464840.89	3767733.63	5.1128E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.75E-04	0.00E+00
38	ALL	465051.63	3767706.48	3.0360E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.41E-04	0.00E+00
39	ALL	465113.76	3767740.76	2.9077E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.27E-04	0.00E+00
40	ALL	464983.03	3767709.42	3.5366E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.98E-04	0.00E+00
41	ALL	464936.48	3767709.42	3.8988E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.38E-04	0.00E+00
42	ALL	464900.24	3767700.15	4.0704E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.58E-04	0.00E+00
43	ALL	464861.93	3767700.15	4.3716E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	4.92E-04	0.00E+00
44	ALL	464823.62	3767700.15	4.6542E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.23E-04	0.00E+00
45	ALL	465048.45	3767613.86	2.4200E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.72E-04	0.00E+00
46	ALL	465081.75	3767627.58	2.3551E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.65E-04	0.00E+00
47	ALL	465115.04	3767641.29	2.2888E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.57E-04	0.00E+00
48	ALL	465148.33	3767655.00	2.2130E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.49E-04	0.00E+00
49	ALL	465181.63	3767668.71	2.1317E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.40E-04	0.00E+00
50	ALL	465214.92	3767682.43	2.0468E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.30E-04	0.00E+00
					'		

51	ALL	465248.21	3767696.14	1.9596E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.20E-04	0.00E+00
52	ALL	464982.61	3767606.51	2.6577E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.99E-04	0.00E+00
53	ALL	464938.54	3767600.15	2.8218E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.17E-04	0.00E+00
54	ALL	464892.36	3767603.48	3.0766E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.46E-04	0.00E+00
55	ALL	464867.38	3767606.51	3.2337E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.64E-04	0.00E+00
56	ALL	464843.61	3767605.00	3.3451E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	3.76E-04	0.00E+00
57	ALL	465048.75	3767513.98	1.9543E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.20E-04	0.00E+00
58	ALL	465082.34	3767527.82	1.9137E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.15E-04	0.00E+00
59	ALL	465115.93	3767541.65	1.8694E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.10E-04	0.00E+00
60	ALL	465149.51	3767555.49	1.8204E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.05E-04	0.00E+00
61	ALL	465183.10	3767569.32	1.7665E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.99E-04	0.00E+00
62	ALL	465216.69	3767583.16	1.7072E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.92E-04	0.00E+00
63	ALL	465250.28	3767596.99	1.6467E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.85E-04	0.00E+00
64	ALL	465283.87	3767610.83	1.5808E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.78E-04	0.00E+00
65	ALL	465317.46	3767624.66	1.5150E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.70E-04	0.00E+00
66	ALL	465351.05	3767638.49	1.4514E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.63E-04	0.00E+00
67	ALL	465384.64	3767652.33	1.3898E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.56E-04	0.00E+00
68	ALL	465418.22	3767666.16				0.00E+00
				1.3311E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.50E-04	
69	ALL	465465.91	3767713.47	1.3055E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-04	0.00E+00
70	ALL	465480.02	3767746.95	1.3397E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.51E-04	0.00E+00
71	ALL	465494.12	3767780.43	1.3802E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.55E-04	0.00E+00
72	ALL	465508.22	3767813.91	1.4312E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.61E-04	0.00E+00
73	ALL	465522.32	3767847.38	1.4941E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.68E-04	0.00E+00
74	ALL	465536.43	3767880.86	1.5723E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.77E-04	0.00E+00
75	ALL	465550.53	3767914.34	1.6685E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.88E-04	0.00E+00
76	ALL	465564.63	3767947.81	1.7853E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.01E-04	0.00E+00
77	ALL	465578.73	3767981.29	1.9246E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.16E-04	0.00E+00
78	ALL	465592.83	3768014.77	2.0871E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.35E-04	0.00E+00
79	ALL		3768048.25		· · · · · · · · · · · · · · ·		0.00E+00
		465606.94		2.2716E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.55E-04	
80	ALL	465621.04	3768081.72	2.4747E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.78E-04	0.00E+00
81	ALL	465015.16	3767500.15	1.9921E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.24E-04	0.00E+00
82	ALL	464976.85	3767500.15	2.1004E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.36E-04	0.00E+00
83	ALL	464938.54	3767500.15	2.2180E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.49E-04	0.00E+00
84	ALL	464900.24	3767500.15	2.3449E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.64E-04	0.00E+00
85	ALL	464861.93	3767500.15	2.4772E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.79E-04	0.00E+00
86	ALL	464823.62	3767500.15	2.6113E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.94E-04	0.00E+00
87	ALL	464788.62	3768120.42	4.7567E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.35E-03	0.00E+00
88	ALL	464774.65	3768159.86	4.4692E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.03E-03	0.00E+00
89	ALL	464789.19	3768192.88	6.0008E-06	1YrCancerHighEnd InhSoilDermMMilkCrops	6.75E-03	0.00E+00
90	ALL	464784.13	3768217.00	5.5270E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.22E-03	0.00E+00
					· · · · · · · · · · · · · · ·		
91	ALL	464779.42	3768254.66	5.0009E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.62E-03	0.00E+00
92	ALL	464784.37	3768288.45	5.2031E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.85E-03	0.00E+00
93	ALL	464791.09	3768316.44	5.6311E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.33E-03	0.00E+00
94	ALL	464790.60	3768374.03	4.1800E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.70E-03	0.00E+00
95	ALL	464801.43	3768399.97	4.3014E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.84E-03	0.00E+00
96	ALL	464728.78	3768096.04	2.2453E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.53E-03	0.00E+00
97	ALL	464773.93	3768035.85	2.3936E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.69E-03	0.00E+00
98	ALL	464712.14	3768162.54	2.0951E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.36E-03	0.00E+00
99	ALL	464735.57	3768216.58	2.6926E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.03E-03	0.00E+00
100	ALL	464709.14	3768225.03	1.9571E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.20E-03	0.00E+00
101	ALL	464730.05	3768252.50	2.3903E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.69E-03	0.00E+00
			3768280.24	2.2649E-06			0.00E+00
102	ALL	464730.85 464724.95	3768318.27		1YrCancerHighEnd_InhSoilDermMMilkCrops	2.55E-03	0.00E+00 0.00E+00
103	ALL			1.8522E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.08E-03	
104	ALL	464705.67	3768399.55	1.0260E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.15E-03	0.00E+00
105	ALL	464744.82	3768399.23	1.5685E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.76E-03	0.00E+00
106	ALL	464699.80	3768055.38	1.6266E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.83E-03	0.00E+00
107	ALL	464790.49	3767993.95	1.9469E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.19E-03	0.00E+00
108	ALL	464655.84	3768110.91	1.2661E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.42E-03	0.00E+00
109	ALL	464594.11	3768086.89	8.3588E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.40E-04	0.00E+00
110	ALL	464650.18	3768032.06	1.1404E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.28E-03	0.00E+00
111	ALL	464704.36	3767959.82	1.2462E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.40E-03	0.00E+00
112	ALL	464763.99	3767934.99	1.3185E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.48E-03	0.00E+00
113	ALL	464586.34	3768157.16	7.6238E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.57E-04	0.00E+00
114	ALL	464586.63	3768193.39	7.2972E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.21E-04	0.00E+00
115	ALL	464586.91	3768229.62	6.8776E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.73E-04	0.00E+00
116	ALL	464587.19	3768265.85	6.3930E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.19E-04	0.00E+00
117	ALL	464598.90	3768316.69	6.0707E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.83E-04	0.00E+00
118	ALL	464598.92	3768333.88	5.7857E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.51E-04	0.00E+00
119	ALL	464584.66	3768400.53	4.3986E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.95E-04	0.00E+00

120	ALL	464599.22	3768401.31	4.7503E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.34E-04	0.00E+00
121	ALL	464557.17	3768089.10	6.7404E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.58E-04	0.00E+00
122	ALL	464594.54	3768040.20	8.3431E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.38E-04	0.00E+00
123	ALL	464596.65	3767950.25	7.8293E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.80E-04	0.00E+00
124	ALL	464650.26	3767895.75	8.5880E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.66E-04	0.00E+00
125	ALL	464724.24	3767881.54	9.7504E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.10E-03	0.00E+00
126	ALL	464543.91	3768158.56	5.8961E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.63E-04	0.00E+00
127	ALL	464544.19	3768194.79	5.6239E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.32E-04	0.00E+00
128	ALL		3768231.02				0.00E+00
		464544.48		5.3059E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.97E-04	
129	ALL	464544.76	3768267.25	4.9544E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.57E-04	0.00E+00
130	ALL	464545.04	3768303.48	4.5842E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.16E-04	0.00E+00
131	ALL	464553.52	3768344.47	4.3167E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.85E-04	0.00E+00
132	ALL	464552.61	3768379.56	3.9282E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.42E-04	0.00E+00
133	ALL	464560.12	3768401.79	3.8843E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.37E-04	0.00E+00
134	ALL	464486.32	3768091.72	4.6911E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.28E-04	0.00E+00
135	ALL	464511.71	3768029.41	5.4748E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.16E-04	0.00E+00
136	ALL	464527.31	3767949.85	5.8413E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.57E-04	0.00E+00
137	ALL	464573.89	3767895.87	6.6693E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	7.50E-04	0.00E+00
138	ALL	464594.10	3767854.28	6.6412E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.47E-04	0.00E+00
	ALL	464668.34	3767834.82				0.00E+00
139				7.5502E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.49E-04	
140	ALL	464730.45	3767808.95	7.4125E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.34E-04	0.00E+00
141	ALL	464448.27	3768151.99	3.7246E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.19E-04	0.00E+00
142	ALL	464449.98	3768205.31	3.5016E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.94E-04	0.00E+00
143	ALL	464499.76	3768249.73	4.0732E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.58E-04	0.00E+00
144	ALL	464450.19	3768252.13	3.2604E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.67E-04	0.00E+00
145	ALL	464475.04	3768304.03	3.2781E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.69E-04	0.00E+00
146	ALL	464475.33	3768340.26	3.0513E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	3.43E-04	0.00E+00
147	ALL	464458.51	3768392.87	2.5831E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	2.90E-04	0.00E+00
148	ALL	464510.08	3768392.78	3.1471E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.54E-04	0.00E+00
149	ALL	464397.94	3768095.53	3.2334E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.64E-04	0.00E+00
150	ALL	464445.32	3768040.11	4.0700E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.58E-04	0.00E+00
151	ALL	464485.23	3767948.70	4.9236E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.54E-04	0.00E+00
152	ALL	464507.67	3767898.28	5.2657E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.92E-04	0.00E+00
153	ALL	464567.15	3767801.98	5.6135E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.31E-04	0.00E+00
154	ALL	464597.79	3767762.28	5.5270E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.22E-04	0.00E+00
155	ALL	464691.11	3767755.34	6.0578E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.81E-04	0.00E+00
156	ALL	464757.37	3767727.74	5.5047E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.19E-04	0.00E+00
157	ALL	464394.66	3768151.11	3.0183E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.39E-04	0.00E+00
158	ALL	464399.57	3768203.72	2.8828E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	3.24E-04	0.00E+00
159	ALL	464404.48	3768232.11	2.8135E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.16E-04	0.00E+00
			3768261.22				
160	ALL	464400.85		2.6569E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.99E-04	0.00E+00
161	ALL	464405.05	3768304.57	2.5121E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.83E-04	0.00E+00
162	ALL	464413.16	3768332.26	2.4538E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.76E-04	0.00E+00
163	ALL	464405.61	3768377.03	2.2148E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.49E-04	0.00E+00
164	ALL	464388.80	3768400.09	2.0624E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.32E-04	0.00E+00
165	ALL	464316.21	3768093.35	2.4560E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.76E-04	0.00E+00
166	ALL	464341.35	3768031.63	2.7977E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.15E-04	0.00E+00
167	ALL	464390.36	3767961.00	3.4474E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.88E-04	0.00E+00
168	ALL	464391.64	3767908.19	3.5169E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	3.96E-04	0.00E+00
169	ALL	464388.64	3767858.93	3.4909E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.93E-04	0.00E+00
170	ALL	464441.92	3767784.75	3.9637E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.46E-04	0.00E+00
			3767734.31				
171	ALL	464445.37		3.8265E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.30E-04	0.00E+00
172	ALL	464546.78	3767715.46	4.6026E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.18E-04	0.00E+00
173	ALL	464600.10	3767689.48	4.7011E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.29E-04	0.00E+00
174	ALL	464669.82	3767664.21	4.6033E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.18E-04	0.00E+00
175	ALL	464731.34	3767638.59	4.2110E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.74E-04	0.00E+00
176	ALL	464303.92	3768160.43	2.2184E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.49E-04	0.00E+00
177	ALL	464249.35	3768203.43	1.8180E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.04E-04	0.00E+00
178	ALL	464304.48	3768232.89	2.0388E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.29E-04	0.00E+00
179	ALL	464294.44	3768280.52	1.8560E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	2.09E-04	0.00E+00
180	ALL	464253.05	3768266.18	1.6973E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.91E-04	0.00E+00
181	ALL	464253.69	3768326.98	1.5648E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.76E-04	0.00E+00
182	ALL	464305.61	3768377.81		1YrCancerHighEnd_InhSoilDermMMilkCrops	1.76L-04 1.88E-04	0.00E+00
				1.6695E-07			
183	ALL	464307.48	3768402.53	1.6778E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.89E-04	0.00E+00
184	ALL	464195.72	3768093.45	1.7681E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.99E-04	0.00E+00
185	ALL	464245.74	3768043.19	2.0894E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.35E-04	0.00E+00
186	ALL	464251.85	3767945.57	2.2682E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.55E-04	0.00E+00
187	ALL	464295.71	3767896.38	2.6265E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.95E-04	0.00E+00
188	ALL	464319.27	3767841.14	2.8494E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.20E-04	0.00E+00
					·		

400		464244.06	2767770 07	2 24425 27	47.6	2 425 04	0.005.00
189	ALL	464344.96	3767778.07	3.0449E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.42E-04	0.00E+00
190	ALL	464370.66	3767714.99	3.1615E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.56E-04	0.00E+00
191	ALL	464393.93	3767657.90	3.1861E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.58E-04	0.00E+00
192	ALL	464471.05	3767614.97	3.4679E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.90E-04	0.00E+00
193	ALL	464537.49	3767609.80	3.7387E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.20E-04	0.00E+00
194	ALL	464597.51	3767600.71	3.8433E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.32E-04	0.00E+00
195	ALL	464666.44	3767565.62	3.5622E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.01E-04	0.00E+00
196	ALL	464729.31	3767539.43	3.2122E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.61E-04	0.00E+00
197	ALL	464203.92	3768161.21	1.6979E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.91E-04	0.00E+00
198	ALL	464204.20	3768197.44	1.6369E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.84E-04	0.00E+00
199	ALL	464204.49	3768233.67	1.5698E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.77E-04	0.00E+00
200	ALL	464204.77	3768269.90	1.5045E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.69E-04	0.00E+00
201	ALL	464205.05	3768306.13	1.4375E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.62E-04	0.00E+00
202	ALL	464205.33	3768342.36	1.3698E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.54E-04	0.00E+00
203	ALL	464205.62	3768378.59	1.3082E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-04	0.00E+00
204	ALL	464181.68	3768385.84	1.2286E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.38E-04	0.00E+00
205	ALL	464800.97	3768504.80	1.2346E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.39E-03	0.00E+00
206	ALL	464722.63	3768454.89	8.6980E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.78E-04	0.00E+00
207	ALL	464755.26	3768514.31	7.6614E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.62E-04	0.00E+00
208	ALL	464692.51	3768453.05	6.9396E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.80E-04	0.00E+00
209	ALL	464806.34	3768556.81	8.3758E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.42E-04	0.00E+00
210	ALL	464795.73	3768607.76	5.6112E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.31E-04	0.00E+00
211	ALL	464731.59	3768597.97	4.1885E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.71E-04	0.00E+00
212	ALL	464652.75	3768555.65	3.3824E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.80E-04	0.00E+00
213	ALL	464648.13	3768460.31	5.0113E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	5.64E-04	0.00E+00
214	ALL	464658.41	3768597.50	2.9739E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.34E-04	0.00E+00
215	ALL	464578.06	3768575.73	2.3289E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.62E-04	0.00E+00
216	ALL	464587.12	3768510.31	2.9918E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.36E-04	0.00E+00
217	ALL	464586.97	3768654.34	1.9139E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	2.15E-04	0.00E+00
218	ALL	464565.79	3768613.16	1.9989E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.25E-04	0.00E+00
219	ALL	464540.32	3768566.06	2.1017E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.36E-04	0.00E+00
220	ALL	464514.55	3768504.72	2.3023E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.59E-04	0.00E+00
221	ALL	464580.55	3768733.43	1.5452E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.74E-04	0.00E+00
222	ALL	464516.92	3768658.58	1.5422E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.73E-04	0.00E+00
223	ALL	464488.36	3768609.54	1.6025E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.80E-04	0.00E+00
224	ALL	464460.87	3768544.11	1.7426E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.96E-04	0.00E+00
225	ALL	464433.38	3768478.69	1.9231E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.16E-04	0.00E+00
226	ALL	464591.86	3768897.72	1.1361E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.28E-04	0.00E+00
227	ALL	464515.84	3768787.56	1.1775E-07		1.32E-04	0.00E+00
	ALL				1YrCancerHighEnd_InhSoilDermMMilkCrops		
228		464450.47	3768736.15	1.1147E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.25E-04 1.11E-04	0.00E+00
229	ALL ALL	464389.54	3768735.42	9.8388E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.11E-04 1.28E-04	0.00E+00
230		464389.82	3768654.91	1.1373E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops		0.00E+00
231	ALL	464399.05	3768604.32	1.2921E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.45E-04	0.00E+00
232	ALL	464361.59	3768546.59	1.3446E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.51E-04	0.00E+00
233	ALL	464333.74	3768480.32	1.4744E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.66E-04	0.00E+00
234	ALL	464790.46	3769016.10	1.2614E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.42E-04	0.00E+00
235	ALL	464756.97	3769002.21	1.2190E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.37E-04	0.00E+00
236	ALL	464723.47	3768988.32	1.1816E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.33E-04	0.00E+00
237	ALL	464689.98	3768974.43	1.1502E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.29E-04	0.00E+00
238	ALL	464656.48	3768960.54	1.1216E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.26E-04	0.00E+00
239	ALL	464622.98	3768946.65	1.0930E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.23E-04	0.00E+00
240	ALL	464589.49	3768932.76	1.0619E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.19E-04	0.00E+00
241	ALL	464555.99	3768918.87	1.0263E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.15E-04	0.00E+00
242	ALL	464522.49	3768904.98	9.8678E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.11E-04	0.00E+00
243	ALL	464489.00	3768891.09	9.4450E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-04	0.00E+00
244	ALL	464455.50	3768877.20	9.0253E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.02E-04	0.00E+00
245	ALL	464422.00	3768863.32	8.6203E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.69E-05	0.00E+00
246	ALL	464374.46	3768815.99	8.4461E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.50E-05	0.00E+00
247	ALL	464360.41	3768782.56	8.6610E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.74E-05	0.00E+00
248	ALL	464346.37	3768749.13	8.9019E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.00E-04	0.00E+00
249	ALL	464332.32	3768715.70	9.1572E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.03E-04	0.00E+00
250	ALL	464318.27	3768682.27	9.4317E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-04	0.00E+00
251	ALL	464304.23	3768648.84	9.7053E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.09E-04	0.00E+00
252	ALL	464290.18	3768615.41	9.9876E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.12E-04	0.00E+00
253	ALL	464276.13	3768581.98	1.0297E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.16E-04	0.00E+00
254	ALL	464262.09	3768548.55	1.0886E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.22E-04	0.00E+00
255	ALL	464248.04	3768515.12	1.1283E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.27E-04	0.00E+00
256	ALL	464233.99	3768481.69	1.1725E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.32E-04	0.00E+00
257	ALL	464196.15	3768451.72	1.1473E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.29E-04	0.00E+00

250		464000.06	2760020.00	4 20005 07	47.0	4 475 04	0.005.00
258	ALL	464823.96	3769029.99	1.3098E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-04	0.00E+00
259	ALL	464860.80	3769030.10	1.4160E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.59E-04	0.00E+00
260	ALL	464897.64	3769030.22	1.5294E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.72E-04	0.00E+00
261	ALL	464934.48	3769030.33	1.6481E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.85E-04	0.00E+00
262	ALL	464971.31	3769030.44	1.7681E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.99E-04	0.00E+00
263	ALL	464648.62	3768900.17	1.2555E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.41E-04	0.00E+00
264	ALL	464598.76	3768865.27	1.2238E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.38E-04	0.00E+00
265	ALL	464543.20	3768899.82	1.0334E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.16E-04	0.00E+00
266	ALL	464435.38	3768786.50	9.8997E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.11E-04	0.00E+00
267	ALL	464576.68	3768792.98	1.3454E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.51E-04	0.00E+00
268	ALL	464517.20	3768735.64	1.3003E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.46E-04	0.00E+00
269	ALL	464390.78	3768787.63	9.0826E-08	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.02E-04	0.00E+00
270	ALL	464449.18	3768655.15	1.3078E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-04	0.00E+00
				1.1647E-07			
271	ALL	464351.25	3768604.94		1YrCancerHighEnd_InhSoilDermMMilkCrops	1.31E-04	0.00E+00
272	ALL	464301.75	3768605.65	1.0379E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.17E-04	0.00E+00
273	ALL	464264.35	3768454.30	1.3704E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.54E-04	0.00E+00
274	ALL	464306.38	3768455.01	1.5050E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.69E-04	0.00E+00
275	ALL	464266.49	3768513.77	1.1738E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.32E-04	0.00E+00
276	ALL	464361.58	3768453.94	1.7268E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.94E-04	0.00E+00
277	ALL	464393.27	3768455.01	1.8664E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.10E-04	0.00E+00
278	ALL	464594.48	3768455.72	3.8258E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.30E-04	0.00E+00
279	ALL	464646.48	3768504.15	4.0551E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.56E-04	0.00E+00
280	ALL	464766.14	3768459.64	1.2715E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.43E-03	0.00E+00
281	ALL	464697.76	3768492.76	5.7931E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	6.51E-04	0.00E+00
282	ALL	464362.29	3768398.38	1.9177E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.16E-04	0.00E+00
283	ALL	464337.36	3768384.49	1.8039E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.03E-04	0.00E+00
284	ALL	464245.56	3768177.37	1.8564E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.09E-04	0.00E+00
285	ALL	464251.26	3768150.66	1.9347E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	2.18E-04	0.00E+00
286	ALL	464398.71	3768172.03	2.9902E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.36E-04	0.00E+00
					· · · · · · · · · · · · · · · · ·		
287	ALL	464362.38	3768153.16	2.6881E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.02E-04	0.00E+00
288	ALL	464443.94	3768177.73	3.5438E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.99E-04	0.00E+00
289	ALL	464446.43	3768123.24	3.8147E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.29E-04	0.00E+00
290	ALL	464447.14	3768093.32	3.9379E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.43E-04	0.00E+00
291	ALL	464399.06	3768121.10	3.1675E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.56E-04	0.00E+00
292	ALL	464445.36	3768069.10	3.9890E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.49E-04	0.00E+00
293	ALL	464397.28	3768065.19	3.3124E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.73E-04	0.00E+00
294	ALL	464397.28	3768047.38	3.3597E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.78E-04	0.00E+00
295	ALL	464389.45	3768008.92	3.3508E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.77E-04	0.00E+00
296	ALL	464388.38	3767990.04	3.3757E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.80E-04	0.00E+00
297	ALL	464249.48	3768123.24	1.9749E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.22E-04	0.00E+00
298	ALL	464249.48	3768098.67	2.0174E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.27E-04	0.00E+00
299	ALL	464251.97	3768069.10	2.0819E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.34E-04	0.00E+00
300	ALL	464259.10	3768009.27	2.2217E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	2.50E-04	0.00E+00
301	ALL	464128.74	3767999.66	1.6227E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	1.82E-04	0.00E+00
302	ALL	464177.54	3767934.12	1.8911E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.13E-04	0.00E+00
	ALL		3767910.97	1.9048E-07			0.00E+00
303		464175.04			1YrCancerHighEnd_InhSoilDermMMilkCrops	2.14E-04	
304	ALL	464175.40	3767888.18	1.9296E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.17E-04	0.00E+00
305	ALL	464172.91	3767837.61	1.9634E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.21E-04	0.00E+00
306	ALL	464255.53	3767905.63	2.3406E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.63E-04	0.00E+00
307	ALL	464248.41	3767861.11	2.3407E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.63E-04	0.00E+00
308	ALL	464259.10	3767811.61	2.4389E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.74E-04	0.00E+00
309	ALL	464121.62	3767808.76	1.7706E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.99E-04	0.00E+00
310	ALL	464392.65	3767889.25	3.5366E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.98E-04	0.00E+00
311	ALL	464387.31	3767838.68	3.4703E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.90E-04	0.00E+00
312	ALL	464254.47	3767785.61	2.4209E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.72E-04	0.00E+00
313	ALL	464246.63	3767766.38	2.3793E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.68E-04	0.00E+00
314	ALL	464243.78	3767720.79	2.3611E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.66E-04	0.00E+00
315	ALL	464395.14	3767767.09	3.4599E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.89E-04	0.00E+00
316	ALL	464395.14	3767730.05	3.3824E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.80E-04	0.00E+00
317	ALL	464396.93	3767695.15	3.3092E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.72E-04	0.00E+00
318	ALL	464393.01	3767620.36	3.0701E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.45E-04	0.00E+00
319	ALL	464336.02	3767622.49	2.7666E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.11E-04	0.00E+00
320	ALL	464285.09	3767608.25	2.4878E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.80E-04	0.00E+00
321	ALL	464436.81	3767628.55	3.3443E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.76E-04	0.00E+00
322	ALL	464501.99	3767615.01	3.6184E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.07E-04	0.00E+00
			3767613.59		· · · · · · · · · · · · · · · · ·		0.00E+00 0.00E+00
323	ALL	464515.17		3.6706E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.13E-04	
324	ALL	464553.99	3767603.62	3.7519E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.22E-04	0.00E+00
325	ALL	464577.14	3767599.70	3.7889E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.26E-04	0.00E+00
326	ALL	464600.29	3767615.01	3.9741E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.47E-04	0.00E+00

227	A.I.I	464500.45	2767622 47	4 42045 07	4 VaCara and Link Ford Link Cail Danna NAN Ailli Conna	4.645.04	0.005.00
327	ALL	464598.15	3767632.47	4.1281E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.64E-04	0.00E+00
328	ALL	464598.15	3767651.34	4.3063E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.84E-04	0.00E+00
329	ALL	464595.30	3767669.86	4.4765E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.03E-04	0.00E+00
330	ALL	464446.43	3767761.39	3.9344E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.42E-04	0.00E+00
331	ALL	464446.79	3767713.31	3.7585E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.23E-04	0.00E+00
332	ALL	464598.15	3767731.12	5.1572E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.80E-04	0.00E+00
333	ALL	464597.79	3767709.39	4.9085E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.52E-04	0.00E+00
334	ALL	464441.92	3767784.75	3.9637E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.46E-04	0.00E+00
335	ALL	464574.64	3767758.54	5.2547E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.91E-04	0.00E+00
336	ALL	464586.04	3767784.18	5.6639E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.37E-04	0.00E+00
337	ALL	464654.16	3768165.72	1.2368E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.39E-03	0.00E+00
338	ALL	464658.43	3768216.31	1.2093E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.36E-03	0.00E+00
339	ALL	464686.58	3768168.22	1.6349E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.84E-03	0.00E+00
340	ALL	464745.35	3768161.45	3.0226E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.40E-03	0.00E+00
341	ALL	464745.70	3768339.37	2.2392E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.52E-03	0.00E+00
342	ALL	464771.44	3768339.89	3.4144E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.84E-03	0.00E+00
343	ALL	464789.20	3768247.23	6.0584E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.81E-03	0.00E+00
344	ALL	464657.54	3768255.92	1.1093E-06	1YrCancerHighEnd InhSoilDermMMilkCrops	1.25E-03	0.00E+00
345	ALL	464653.68	3768286.55	9.9110E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.11E-03	0.00E+00
346	ALL	464659.10	3768333.04	8.9566E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.01E-03	0.00E+00
347	ALL	464654.96	3768356.81	7.9554E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.95E-04	0.00E+00
348	ALL	464657.28	3768396.71	6.9810E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.85E-04	0.00E+00
			3768656.39				
349	ALL	464561.71		1.7623E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.98E-04	0.00E+00
350	ALL	464726.88	3768554.04	5.0557E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.69E-04	0.00E+00
351	ALL	464769.36	3768550.43	6.7425E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.58E-04	0.00E+00
352	ALL	464763.95	3768618.40	4.4661E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.02E-04	0.00E+00
353	ALL	464791.36	3768051.79	2.9367E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.30E-03	0.00E+00
354	ALL	464746.53	3768052.39	2.2164E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.49E-03	0.00E+00
355	ALL	464668.08	3768073.59	1.3458E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.51E-03	0.00E+00
356	ALL	464668.08	3768052.09	1.3093E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-03	0.00E+00
357	ALL	464571.50	3767944.35	6.9929E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.86E-04	0.00E+00
358	ALL	464550.90	3767945.12	6.4218E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.22E-04	0.00E+00
359	ALL	464507.90	3767945.12	5.3858E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.06E-04	0.00E+00
360	ALL	464504.81	3767995.84	5.3415E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.01E-04	0.00E+00
361	ALL	464525.41	3767999.44	5.8563E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.59E-04	0.00E+00
362	ALL	464698.68	3768000.22	1.3898E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.56E-03	0.00E+00
363	ALL	464666.50	3768006.14	1.1947E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.34E-03	0.00E+00
364	ALL	464669.08	3767941.77	1.0337E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.16E-03	0.00E+00
365	ALL	464650.53	3767833.58	7.2709E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.18E-04	0.00E+00
366	ALL	464649.25	3767806.55	6.7376E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.58E-04	0.00E+00
367	ALL	464583.33	3767811.44	5.9422E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.68E-04	0.00E+00
368	ALL	464645.13	3767777.97	6.1872E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.96E-04	0.00E+00
369	ALL	464648.07	3767751.59	5.7817E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.50E-04	0.00E+00
370	ALL	464647.16	3767730.68	5.4560E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	6.14E-04	0.00E+00
371	ALL	464647.76	3767708.57	5.1425E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.78E-04	0.00E+00
372	ALL	464646.86	3767684.64	4.8261E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.43E-04	0.00E+00
372	ALL	464649.58	3767670.10	4.6531E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.23E-04	0.00E+00
374				4.1395E-07	1YrCancerHighEnd InhSoilDermMMilkCrops	4.66E-04	0.00E+00
	ALL	464645.34	3767625.27				
375 276	ALL	464696.84	3767632.84	4.2111E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.74E-04	0.00E+00
376	ALL	464667.15	3767734.62	5.6061E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.30E-04	0.00E+00
377	ALL	464577.49	3767676.46	4.4562E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.01E-04	0.00E+00
378	ALL	464582.03	3767742.80	5.1556E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.80E-04	0.00E+00
379	ALL	464645.64	3767600.23	3.8922E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.38E-04	0.00E+00
380	ALL	464699.87	3767602.96	3.8750E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.36E-04	0.00E+00
381	ALL	464732.89	3767602.35	3.7898E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.26E-04	0.00E+00
382	ALL	464746.82	3767608.11	3.8084E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.28E-04	0.00E+00
383	ALL	464762.88	3767601.14	3.6760E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.13E-04	0.00E+00
384	ALL	464778.33	3767602.96	3.6336E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.09E-04	0.00E+00
385	ALL	464795.29	3767604.47	3.5760E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.02E-04	0.00E+00
386	ALL	464939.80	3767657.79	3.2996E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.71E-04	0.00E+00
387	ALL	464955.21	3767610.45	2.8163E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.17E-04	0.00E+00
388	ALL	464913.74	3767607.20	2.9981E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.37E-04	0.00E+00
389	ALL	464887.39	3767628.71	3.3314E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.75E-04	0.00E+00
390	ALL	465001.90	3767638.10	2.7867E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.13E-04	0.00E+00
391	ALL	465047.87	3767686.51	2.8966E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.26E-04	0.00E+00
392	ALL	465046.84	3767666.68	2.7584E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.10E-04	0.00E+00
393	ALL	465125.12	3767660.24	2.3424E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.63E-04	0.00E+00
394	ALL	465045.04	3767645.57	2.6264E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.95E-04	0.00E+00
395	ALL	465065.64	3767611.32	2.3357E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.63E-04	0.00E+00
			2.3.022.32	500.20,		2.002 04	2.302.00

396	ALL	465084.18	3767603.08	2.2238E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.50E-04	0.00E+00
397	ALL	465106.07	3767608.48	2.1678E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.44E-04	0.00E+00
398	ALL	465127.96	3767600.76	2.0566E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.31E-04	0.00E+00
399	ALL	465148.30	3767601.27	1.9883E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.24E-04	0.00E+00
400	ALL	465168.39	3767603.33	1.9275E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.17E-04	0.00E+00
401	ALL	465168.13	3767620.84	1.9924E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.24E-04	0.00E+00
402	ALL	465190.28	3767619.30	1.9081E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.15E-04	0.00E+00
403	ALL	465240.75	3767615.95	1.7273E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.94E-04	0.00E+00
404	ALL	465293.67	3767726.29	1.8801E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.11E-04	0.00E+00
405	ALL	464882.90	3767866.40	8.5298E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.59E-04	0.00E+00
406	ALL	464965.33	3767852.46	6.3578E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.15E-04	0.00E+00
407	ALL	464928.96	3767930.65	1.1048E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.24E-03	0.00E+00
408	ALL	464963.82	3767928.23	9.6385E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.08E-03	0.00E+00
409	ALL	464852.59	3767927.93	1.2897E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.45E-03	0.00E+00
410	ALL	464994.43	3767865.19	6.1655E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.93E-04	0.00E+00
411	ALL	464753.53	3767902.11	1.1089E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.25E-03	0.00E+00
412	ALL	464696.08	3767911.12	1.0256E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.15E-03	0.00E+00
413	ALL	464810.21	3767873.00	9.7841E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.10E-03	0.00E+00
414	ALL	464805.83	3767854.96	8.9714E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.01E-03	0.00E+00
415	ALL	464729.06	3767870.93	9.4112E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-03	0.00E+00
416	ALL	464768.22	3767844.40	8.6388E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	9.72E-04	0.00E+00
417	ALL	464808.44	3767813.47	7.3976E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.32E-04	0.00E+00
418	ALL	464748.53	3767781.38	6.7049E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	7.54E-04	0.00E+00
419	ALL	464806.30	3767747.51	5.6616E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.37E-04	0.00E+00
420	ALL	464573.81	3767707.93	4.7366E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.33E-04	0.00E+00
421	ALL	464536.37	3767771.40	4.9605E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.58E-04	0.00E+00
422	ALL	464541.72	3767738.24	4.7487E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.34E-04	0.00E+00
423	ALL	464485.02	3767718.62	4.1062E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.62E-04	0.00E+00
424	ALL	464441.87	3767688.32	3.6174E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.07E-04	0.00E+00
425	ALL	464491.44	3767688.32	3.9875E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.48E-04	0.00E+00
426	ALL	464444.83	3767812.34	4.0710E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.58E-04	0.00E+00
427	ALL	464496.02	3767816.12	4.7360E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.33E-04	0.00E+00
428	ALL	464599.18	3767893.71	7.2544E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	8.16E-04	0.00E+00
429	ALL	464549.97	3767899.05	6.1439E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.91E-04	0.00E+00
430	ALL	464528.93	3767899.05	5.6913E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	6.40E-04	0.00E+00
431	ALL	464486.86	3767897.98	4.8849E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.49E-04	0.00E+00
432	ALL	464464.39	3767898.34	4.5104E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.07E-04	0.00E+00
433	ALL	464441.21	3767898.34	4.1592E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.68E-04	0.00E+00
434	ALL	464436.22	3767949.69	4.0793E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.59E-04	0.00E+00
435	ALL	464464.03	3767780.31	4.1869E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.71E-04	0.00E+00
436	ALL	464178.64	3767664.04	2.0467E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.30E-04	0.00E+00
437	ALL	464183.86	3767730.82	2.0677E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.33E-04	0.00E+00
438	ALL	464173.83	3767993.58	1.8059E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.03E-04	0.00E+00
439	ALL	464132.05	3768051.58	1.5774E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.77E-04	0.00E+00
440	ALL	464816.20	3768462.34	2.3584E-06	1YrCancerHighEnd_InhSoilDermMMilkCrops	2.65E-03	0.00E+00
441	ALL	464695.95	3768590.37	3.6127E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.06E-04	0.00E+00
442	ALL	464463.77	3768791.69	1.0412E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.17E-04	0.00E+00
443	ALL	464560.57	3768793.27	1.2945E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.46E-04	0.00E+00
444	ALL	464596.80	3768700.71	1.7456E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.96E-04	0.00E+00
445	ALL	464732.45	3768905.15	1.4625E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.64E-04	0.00E+00
446	ALL	464644.24	3768475.11	4.5610E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	5.13E-04	0.00E+00
447	ALL	464656.93	3768320.37	9.1828E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.03E-03	0.00E+00
448	ALL	464471.81	3768180.03	3.9863E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	4.48E-04	0.00E+00
449	ALL	464283.76	3768323.30	1.6978E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.91E-04	0.00E+00
450	ALL	464268.13	3768395.37	1.5150E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.70E-04	0.00E+00
451	ALL	464181.03	3768356.20	1.2759E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.43E-04	0.00E+00
452	ALL	464555.31	3768450.28	3.2787E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.69E-04	0.00E+00
453	ALL	464587.60	3768540.28	2.7002E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	3.04E-04	0.00E+00
454	ALL	464302.79	3768551.74	1.1709E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.32E-04	0.00E+00
455	ALL	464330.21	3768653.07	1.0109E-07	1YrCancerHighEnd_InhSoilDermMMilkCrops	1.14E-04	0.00E+00

HARP2 - HRACalc (dated 22118) 11/10/2022 4:20:47 PM - Output Log

RISK SCENARIO SETTINGS

Receptor Type: Resident

Scenario: All

Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25

Total Exposure Duration: 1

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25

0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0</pre>

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True

Soil: True
Dermal: True

Mother's milk: True

Water: False Fish: False

Homegrown crops: True

Beef: False Dairy: False Pig: False Chicken: False Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home

3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02 Soil mixing depth (m): 0.01

Dermal climate: Mixed

Household type: HouseholdsthatGarden

Fraction leafy: 0.137 Fraction exposed: 0.137 Fraction protected: 0.137

Fraction root: 0.137

TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details. Tier2 - What was changed: ED or start age changed

Calculating cancer risk

Cancer risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001_Lilac

Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConCancerRisk.csv

Cancer risk total by receptor saved to: G:\BACKUP\57800001_Lilac

Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConCancerRiskSumByRec.csv

Calculating chronic risk

Chronic risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001_Lilac

Ave\HARP Con\CON UNMIT\hra\Unmit ConNCChronicRisk.csv

Chronic risk total by receptor saved to: G:\BACKUP\57800001 Lilac

Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConNCChronicRiskSumByRec.csv

Calculating acute risk

Acute risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001_Lilac

Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConNCAcuteRisk.csv

Acute risk total by receptor saved to: G:\BACKUP\57800001_Lilac

Ave\HARP_Con\CON_UNMIT\hra\Unmit_ConNCAcuteRiskSumByRec.csv

HRA ran successfully

*** MODEL SETUP OPTIONS SUMMARY ***

- ** Model Options Selected:
 - * Model Uses Regulatory DEFAULT Options
 - * Model Is Setup For Calculation of Average CONCentration Values.
 - * NO GAS DEPOSITION Data Provided.
 - * NO PARTICLE DEPOSITION Data Provided.
 - * Model Uses NO DRY DEPLETION. DDPLETE = F
 - * Model Uses NO WET DEPLETION. WETDPLT = F
 - * Stack-tip Downwash.
 - * Model Accounts for ELEVated Terrain Effects.
 - * Use Calms Processing Routine.
 - * Use Missing Data Processing Routine.
 - * No Exponential Decay.
 - * Model Uses URBAN Dispersion Algorithm for the SBL for 252 Source(s),

for Total of 1 Urban Area(s):

Urban Population = 104394.0; Urban Roughness Length = 1.000 m

- * Urban Roughness Length of 1.0 Meter Used.
- * ADJ_U* Use ADJ_U* option for SBL in AERMET
- * TEMP_Sub Meteorological data includes TEMP substitutions
- * Model Assumes No FLAGPOLE Receptor Heights.
- * The User Specified a Pollutant Type of: DPM

**Model Calculates 1 Short Term Average(s) of: 1-HR and Calculates ANNUAL Averages

**This Run Includes: 252 Source(s); 5 Source Group(s); and 455 Receptor(s)

with: 0 POINT(s), including

0 POINTCAP(s) and 0 POINTHOR(s)

and: 251 VOLUME source(s)

and: 1 AREA type source(s)

and: 0 LINE source(s)

and: 0 RLINE/RLINEXT source(s)

and: 0 OPENPIT source(s)

and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

and: 0 SWPOINT source(s)

*** AERMOD - VERSION 22112 *** *** C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000 *** 11/10/22

*** AERMET - VERSION 16216 *** ***

*** 10:32:14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: FONT_V9_ADJU\FONT_v9.SFC Met Version: 16216

Profile file: FONT_V9_ADJU\FONT_v9.PFL

Surface format: FREE Profile format: FREE

Surface station no.: 3102 Upper air station no.: 3190

Name: UNKNOWN Name: UNKNOWN

Year: 2011 Year: 2011

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-

ID

AREA1 1ST HIGHEST VALUE IS 10.50529 AT (464789.20, 3768247.23, 302.70, 302.70, 0.00) DC

2ND HIGHEST VALUE IS 10.40658 AT (464789.19, 3768192.88, 301.92, 301.92, 0.00) DC

3RD HIGHEST VALUE IS 9.76078 AT (464791.09, 3768316.44, 304.00, 304.00, 0.00) DC

4TH HIGHEST VALUE IS 9.58413 AT (464784.13, 3768217.00, 302.00, 302.00, 0.00) DC

5TH HIGHEST VALUE IS 9.01990 AT (464784.37, 3768288.45, 303.07, 303.07, 0.00) DC

OFF1 1ST HIGHEST VALUE IS 12.79156 AT (465598.49, 3768493.26, 306.00, 306.00, 0.00) DC

2ND HIGHEST VALUE IS 6.38812 AT (465572.55, 3768556.60, 307.00, 307.00, 0.00) DC

3RD HIGHEST VALUE IS 5.71866 AT (464816.20, 3768462.34, 305.87, 305.87, 0.00) DC

4TH HIGHEST VALUE IS 5.61809 AT (465637.12, 3768362.88, 304.55, 304.55, 0.00) DC

5TH HIGHEST VALUE IS 5.14851 AT (464801.43, 3768399.97, 305.00, 305.00, 0.00) DC

OFF2 1ST HIGHEST VALUE IS 63.39024 AT (464555.31, 3768450.28, 307.00, 307.00, 0.00) DC 2ND HIGHEST VALUE IS 57.68578 AT (464692.51, 3768453.05, 306.00, 306.00, 0.00) DC 3RD HIGHEST VALUE IS 55.31766 AT (464560.12, 3768401.79, 306.00, 306.00, 0.00) DC 4TH HIGHEST VALUE IS 54.43871 AT (464307.48, 3768402.53, 308.00, 308.00, 0.00) DC 5TH HIGHEST VALUE IS 54.36215 AT (464599.22, 3768401.31, 305.95, 305.95, 0.00) DC

OFF3 1ST HIGHEST VALUE IS 10.37124 AT (465598.49, 3768493.26, 306.00, 306.00, 0.00) DC 2ND HIGHEST VALUE IS 5.63854 AT (465572.55, 3768556.60, 307.00, 307.00, 0.00) DC 3RD HIGHEST VALUE IS 4.39080 AT (465637.12, 3768362.88, 304.55, 304.55, 0.00) DC 4TH HIGHEST VALUE IS 3.56773 AT (465546.61, 3768619.94, 307.91, 307.91, 0.00) DC 5TH HIGHEST VALUE IS 2.41938 AT (465520.67, 3768683.27, 309.00, 309.00, 0.00) DC

*** AERMOD - VERSION 22112 *** *** C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000 *** 11/10/22

*** AERMET - VERSION 16216 *** *** 10:32:14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF DPM IN MICROGRAMS/M**3

NETWORK

GROUP ID AVERAGE CONC RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

ALL 1ST HIGHEST VALUE IS 64.93576 AT (464555.31, 3768450.28, 307.00, 307.00, 0.00) DC 2ND HIGHEST VALUE IS 61.81972 AT (464801.43, 3768399.97, 305.00, 305.00, 0.00) DC 60.82474 AT (464692.51, 3768453.05, 306.00, 306.00, 0.00) DC **3RD HIGHEST VALUE IS** 4TH HIGHEST VALUE IS 57.48633 AT (464722.63, 3768454.89, 305.83, 305.83, 0.00) DC **5TH HIGHEST VALUE IS** 57.02749 AT (464560.12, 3768401.79, 306.00, 306.00, 0.00) DC **6TH HIGHEST VALUE IS** 56.40663 AT (464599.22, 3768401.31, 305.95, 305.95, 0.00) DC 7TH HIGHEST VALUE IS 55.22499 AT (464307.48, 3768402.53, 308.00, 308.00, 0.00) DC 8TH HIGHEST VALUE IS 54.46538 AT (464584.66, 3768400.53, 306.00, 306.00, 0.00) DC 53.99710 AT (464744.82, 3768399.23, 305.00, 305.00, 0.00) DC 9TH HIGHEST VALUE IS **10TH HIGHEST VALUE IS** 53.51884 AT (464594.48, 3768455.72, 306.65, 306.65, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

*** AERMOD - VERSION 22112 *** *** C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000 *** 11/10/22

*** 10:32:14

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3

DATE NETWORK

GROUP ID AVERAGE CONC (YYMMDDHH) RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

.....

AREA1 HIGH 1ST HIGH VALUE IS 1547.81500 ON 16012008: AT (464791.09, 3768316.44, 304.00, 304.00, 0.00) DC

OFF1 HIGH 1ST HIGH VALUE IS 346.94103 ON 12021516: AT (464816.20, 3768462.34, 305.87, 305.87, 0.00) DC

OFF2 HIGH 1ST HIGH VALUE IS 1304.46942 ON 11092608: AT (464307.48, 3768402.53, 308.00, 308.00, 0.00) DC

OFF3 HIGH 1ST HIGH VALUE IS 304.31434 ON 16121216: AT (465598.49, 3768493.26, 306.00, 306.00, 0.00) DC

ALL HIGH 1ST HIGH VALUE IS 2686.54557 ON 16012008: AT (464801.43, 3768399.97, 305.00, 305.00, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART

GP = GRIDPOLR

DC = DISCCART

DP = DISCPOLR

*** AERMOD - VERSION 22112 *** *** C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000 *** 11/10/22

```
*** AERMET - VERSION 16216 *** ***
                                                                          10:32:14
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*
*** Message Summary : AERMOD Model Execution ***
----- Summary of Total Messages ------
A Total of
              0 Fatal Error Message(s)
A Total of 7 Warning Message(s)
A Total of
           838 Informational Message(s)
A Total of
            43848 Hours Were Processed
A Total of
           40 Calm Hours Identified
A Total of 798 Missing Hours Identified (1.82 Percent)
 ****** FATAL ERROR MESSAGES ******
       *** NONE ***
 ****** WARNING MESSAGES ******
```

ME W186	3965	MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50)
ME W187	3965	MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET	
MX W438	8800	METQA: Convective Velocity Data Out-of-Range. KURDAT = 12010216	
MX W438	11536	METQA: Convective Velocity Data Out-of-Range. KURDAT = 12042516	
MX W420	16779	METQA: Wind Speed Out-of-Range. KURDAT = 12113003	
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at: 15010101	
MX W450	26305	CHKDAT: Record Out of Sequence in Meteorological File at: 1 year gap	

Health Risk Assessments

Operational Health Risk Assessment

DPM

Emission Assumptions

Emission Factors

1) Truck Emissions

(1) EMFAC2021

(a) Calculations for San Bernardino County portion of South Coast Air Basin

Fleet mix consistent with the buildout year CalEEMod run and based

(b) Truck Mix on TIA

(c) Truck Idle
Two instances per truck trip
(d) Onsite Vehicle Travel Speed
(e) Offsite Vehicle Travel Speed
5 mph for trucks
5-25 mph aggregated for trucks

Traffic Allocation

- 1) Traffic distribution based on project-specific traffic impact analysis
- 2) Project-specific trip generation (based on traffic impact analysis)
- 3) Onsite travel emissions generated from diesel vehicles
- 4) Onsite idling emissions generated only by trucks

Emission Source Configuration

- 1) Project onsite truck traffic represented by a line source
- 2) Project onsite truck idling represented as line sources (series of point sources)
- 3) Offsite vehicles represented by a line source

Onsite Vehicle Travel Segments

Segment	Source ID	Segment Travel Distance (m)	
On-site Truck Route 1	SLINE4	310.1	On-site Truck Travel Route 1
Onsite Truck Idling			
On-site Idling – Location 1	SLINE5	159.3	Truck Parking
On-site Idling – Location 2	SLINE6	148.7	Docking Area
On-site Idling – Location 3	SLINE7	63.9	Gate
Offsite Vehicle Travel Segments			
Segment		Segment Travel Distance (m)	
Offsite 1 - Truck Route 1	SLINE1	663.2	Off-site Truck Travel
Offsite 2 - Truck Route 2	SLINE2	749.8	Off-site Truck Travel
Offsite 3 - Truck Route 3	SLINE3	859.0	Off-site Truck Travel

Other Input Parameters

Lilac and Santa Ana Warehouse Project Fleet Mix Adjustments

Default San Bernardi	ino-South Coast	County 2024				_								Total
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.540566	0.056059	0.17268	0.136494	0.026304	0.007104	0.01168	0.017449	0.000554	0.000251	0.025076	0.000954	0.00483	1.00000
T														0
Trucks Only*									0.0110					
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН	
	0	0	0	0	0.0224959	0.0060755	0.2761905	0.6952381	0	0	0	0	0	1
Passenger Cars														0
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
Default Light Duty														
Fleet Mix	0.540566	0.056059	0.17268	0.136494	0	0	0	0	0	0	0	0	0	0.905799
Difference to be														
allocated	0.094201													
Revised														
Passenger Cars														
Fleet Mix 2024	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН	
FICCULATIVE ZUZ4	0.596784	0.061889	0.190638	0.150689	0	0	0	0	0	0.003	0	0	0	1
	0.596784	0.061889	0.190638	0.150689	U	U	U	U	U	U	U	U	U	1

Vehicle Fleet Mix

Total Daily Truck Trips		Trucks	Total Daily Truck Trips
(Trips/day)	Daily Trips	210	210
210	Fleet Mix	100.0%	100.0%

210

Vehicle Fleet

	Trucks		Total Number of	Number of Daily	Number of Daily	Total Number		% Non-Diesel	
	Project	EMFAC	Daily Trips	Diesel	Non-Diesel	of Daily Trips	% Diesel Trips	Trips	Total Trips
	Vehicle Mix	% Diesel		Trips	Trips				
LHDT1 (2-axle truck)	2.2%	40.5%	5	1.9	3	5	0.91%	1.34%	
LHDT2 (2-axle truck)	0.6%	64.3%	1	0.8	0	1	0.39%	0.22%	
MHDT (3 axle truck)	27.6%	100.0%	58	58.0	0	58	27.62%	0.00%	
HHDT (4+ axle truck)	69.5%	100.0%	146	146.0	0	146	69.52%	0.00%	
Truck Subtotal	100.0%		210	206.7	3	210	98.44%	1.56%	100.00%

Truck fleet mix consistent with the project-specific traffic information.

Source of Traffic Analysis: Urban Crossroads. 2022. Santa Ana & Lilac Warehouse (MCN 2022-0065) Traffic Analysis. September 23.

Assumed 100% diesel for MHDT and HHDT; % Diesel taken from EMFAC2021 for LHDT1, and LHDT2.

Trip Distribution

Vehicle Allocation - Number of Daily Diesel Trips

Allocation of Building Trips

Total Idling (Diesel Trucks Idling)

Percent Allocation - On-site Travel

100% On-site Travel – Route 1 (DSL trucks)

0% On-site Travel - Route 2 (DSL trucks)

0% On-site Travel – Route 3 (DSL trucks)

100% Total Diesel Truck Trips

Segment - On-site Travel On-site Truck Route 1	Source ID SLINE4	LDA 0.0	LDT1 0.0	LDT2 0.0	MDT 0.0	LHDT1 1.9	LHDT2 0.8	MHDT 58.0	HHDT 146.0	OBUS 0.0	UBUS 0.0	SBUS 0.0	MH 0.0	Total 206.7
Total Diesel Trucks	_	0	0	0	0	2	1	58	146	0	0	0	0	207
Percent Allocation of Trips - On-site Diesel Truck Idling														
		50.0%	On-site Idli	ng – Locatio	n 1	Truck Park	ing							
		50.0%	On-site Idli	ng – Locatio	n 2	Docking Ar	ea							
		100.0%	On-site Idli	ng – Locatio	n 3	Gate								
		200%	Total Diese	l Truck Trips	two occi	urrences per	trip)							
Segment - On-site Truck Idle	Source ID	LDA	LDT1	LDT2	MDT	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	SBUS	МН	Total
9														
On-site Idling – Location 1	SLINE5	0.0	0.0	0.0	0.0	1.0	0.4	29.0	73.0	0.0	0.0	0.0	0.0	103.4
On-site Idling – Location 2	SLINE6	0.0	0.0	0.0	0.0	1.0	0.4	29.0	73.0	0.0	0.0	0.0	0.0	103.4
On-site Idling – Location 3	SLINE7	0.0	0.0	0.0	0.0	1.9	0.8	58.0	146.0	0.0	0.0	0.0	0.0	206.7

2

116

292

0

413

Diesel Vehicle Emissions

Processes Modeled

Diesel vehicle exhaust Diesel vehicle idling

Facility Operations

24 hrs/day, 52 weeks/year

On-site Travel Links Modeled

							Ave			Total
	Average			Trips per	Link	Link	Emissions	Ave		Emissions for
	Truck	Speed	Emission	Daily (in	Length	Length	Over Link	Emissions	Average Emissions	all Vehicles
Link	Туре	(mph)	Factor (g/mi)	and out)	(m)	(mi)	(g/day)	(lbs/day)	(g/sec)	(g/sec)
SLINE4	LHDT1	5	0.098	1.9	310.1	0.19	3.616E-02	7.96E-05	4.185E-07	
	LHDT2	5	0.089	0.8	310.1	0.19	1.407E-02	3.10E-05	1.629E-07	
	MHDT	5	0.033	58.0	310.1	0.19	3.735E-01	8.23E-04	4.323E-06	
	HHDT	5	0.013	146.0	310.1	0.19	3.763E-01	8.29E-04	4.355E-06	9.26E-06

Diesel Truck Idling Emissions

		DPM Emission				Average	Total Emissions
Onsite Vehicle Travel Segments	Truck Type	Factor (grams/trip)	Number Idling Vehicle Trips/day	Emissions (g/day)	Emissions (lb/day)	Emissions (g/sec)	for all Vehicles (g/sec)
SLINE5	LHDT1	0.028	1.0	2.63E-02	5.79E-05	3.04E-07	
	LHDT2	0.028	0.4	1.13E-02	2.49E-05	1.31E-07	
	MHDT	0.020	29.0	5.78E-01	1.27E-03	6.69E-06	
	HHDT	0.033	73.0	2.43E+00	5.34E-03	2.81E-05	3.5200E-05
SLINE6	LHDT1	0.028	1.0	2.63E-02	5.79E-05	3.04E-07	
	LHDT2	0.028	0.4	1.13E-02	2.49E-05	1.31E-07	
	MHDT	0.020	29.0	5.78E-01	1.27E-03	6.69E-06	
	HHDT	0.033	73.0	2.43E+00	5.34E-03	2.81E-05	3.5200E-05
SLINE7	LHDT1	0.028	1.9	5.26E-02	1.16E-04	6.09E-07	
	LHDT2	0.028	0.8	2.26E-02	4.98E-05	2.62E-07	
	MHDT	0.020	58.0	1.16E+00	2.55E-03	1.34E-05	
	HHDT	0.033	146.0	4.85E+00	1.07E-02	5.62E-05	7.0399E-05

Project Operations 24 hours/day

Emission Rates Running Emissions 5-25 mph Averaged (EMFAC2021 for the San Bernardino County portion of South Coast Air

Basin by vehicle type and speed)

Trip Distribution Percentages based on the truck trip distribution provided in the project-specific traffic study (Urban Crossroads,

2022)

Offsite DSL Truck Roadway Emissions

Segment ID	Description	% total Trips	
SLINE1	Offsite 1 - Truck Route 1	50.0%	
SLINE2	Offsite 2 - Truck Route 2	10.0%	
SLINE3	Offsite 3 - Truck Route 3	40.0%	
		Total 100.0%	

Segment ID: SLINE1

Travel Distance: 663.2 meters
Operations 24 hours/day

	Daily Trips	Emission Factor	Travel Distance	Emissions	Emissions
Vehicle Class	(trips/day)	(g/mi)	(mi)	(g/day)	(g/sec)
LHDT1-DSL	1.0	0.0688540	0.41	0.027	3.14E-07
LHDT2-DSL	0.4	0.0635578	0.41	0.011	1.24E-07
MHDT-DSL	29.0	0.0197525	0.41	0.236	2.73E-06
HHDT-DSL	73.0	0.0094708	0.41	0.285	3.30E-06
Total	103.4			5.59E-01	6.47E-06

Segment ID: SLINE2

Travel Distance: 749.8 meters
Operations 24 hours/day

	Daily Trips	Emission Factor	Travel Distance	Emissions	Emissions
Vehicle Class	(trips/day)	(g/mi)	(mi)	(g/day)	(g/sec)
LHDT1-DSL	0.2	0.0688540	0.47	0.006	7.09E-08
LHDT2-DSL	0.1	0.0635578	0.47	0.002	2.81E-08
MHDT-DSL	5.8	0.0197525	0.47	0.053	6.18E-07
HHDT-DSL	14.6	0.0094708	0.47	0.064	7.45E-07
Total	20.7			1.26E-01	1.46E-06

Segment ID: SLINE3

Travel Distance: 859.0 meters
Operations 24 hours/day

	Daily Trips	Emission Factor	Travel Distance	Emissions	Emissions
Vehicle Class	(trips/day)	(g/mi)	(mi)	(g/day)	(g/sec)
LHDT1-DSL	0.8	0.0688540	0.53	0.028	3.25E-07
LHDT2-DSL	0.3	0.0635578	0.53	0.011	1.29E-07
MHDT-DSL	23.2	0.0197525	0.53	0.245	2.83E-06
HHDT-DSL	58.4	0.0094708	0.53	0.295	3.42E-06
Total	82.7			5.79E-01	6.70E-06

DPM 2024

EMFAC Running Diesel Exhaust Emissions in units of grams/mile

EMFAC2021

			Emission Fa	actor (g/mi)	
		5 mph	10 mph	25 mph	35 mph
LHDT1	DSL	0.098	_	0.045	_
LHDT2	DSL	0.089	_	0.042	_
MHDT	DSL	0.033	_	0.009	_
HHDT	DSL	0.013	_	0.007	_

Idling Emissions for Trucks (Emission Factors from EMFAC2021) in units of g/vehicle/day for

EMFAC2021

		Vehicle	
Vehicle		Speed	DPM
Class	Fuel	(mph)	(grams/trip)
LHDT1	DSL	Idle	0.027512
LHDT2	DSL	Idle	0.027555
MHDT	DSL	Idle	0.019925
HHDT	DSL	Idle	0.033231

Off-site Truck Running Emissions for the Health Risk Analysis—Lilac and Santa Ana Warehouse Project

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Sub-Area Region: San Bernardino (SC) Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

		Vehicle														
Region	Calendar Year	Category	Model Year	Speed	Fuel	VMT	NOx_RUNEX	PM2.5_RUNEX	PM10_RUNEX	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	TOG_RUNEX	CO_RUNEX	SOx_RUNEX
San Bernardino (SC)	2024	HHDT	Aggregate	5	Diesel	4.553095853	10.97288721	0.012799861	0.013378614	3250.087988	0.00597613	0.512052686	0.12866445	0.146474682	1.183567911	0.03077639
San Bernardino (SC)	2024	HHDT	Aggregate	10	Diesel	261.0307919	8.37719564	0.011874125	0.01241102	2872.271843	0.003607496	0.452527598	0.077668402	0.088419564	0.714535347	0.027198697
San Bernardino (SC)	2024	HHDT	Aggregate	15	Diesel	745.720957	5.457175888	0.008940216	0.009344453	2325.456301	0.001805679	0.366376587	0.03887578	0.044257117	0.39891191	0.022020681
San Bernardino (SC)	2024	HHDT	Aggregate	20	Diesel	51746.18932	3.13121204	0.005055242	0.005283817	2035.207651	0.001015467	0.320647794	0.021862727	0.02488905	0.248433212	0.019272199
San Bernardino (SC)	2024	HHDT	Aggregate	25	Diesel	21499.32612	3.251988919	0.006635812	0.006935854	1828.871197	0.000845486	0.288139402	0.018203081	0.020722822	0.210749127	0.017318317
						Total	31.1904597	0.045305256	0.047353758	12311.89498	0.013250259	1.939744068	0.285274441	0.324763236	2.756197505	0.116586283
San Bernardino (SC)	2024	LHDT1	Aggregate	5	Diesel	2.922869115	2.280960701	0.093974392	0.098223497	1186.121727	0.019973524	0.186873961	0.430018211	0.489547144	1.370349891	0.011239106
San Bernardino (SC)	2024	LHDT1	Aggregate	10	Diesel	110.4122937	2.113757856	0.076853425	0.080328396	1028.19191	0.016397103	0.161992054	0.353019972	0.401889768	1.092387548	0.009742641
San Bernardino (SC)	2024	LHDT1	Aggregate	15	Diesel	343.7861553	1.967287186	0.063246262	0.066105977	865.7554073	0.013618786	0.136400117	0.29320444	0.333793761	0.877098969	0.008203472
San Bernardino (SC)	2024	LHDT1	Aggregate	20	Diesel	4208.857425	1.848635621	0.052183642	0.054543155	748.9733077	0.011384242	0.11800105	0.245096025	0.27902553	0.70529094	0.007096903
San Bernardino (SC)	2024	LHDT1	Aggregate	25	Diesel	11595.10188	1.74882211	0.04311909	0.045068744	651.1556664	0.009550078	0.10258984	0.205607561	0.234070539	0.566286735	0.006170031
						Total	9.959463473	0.329376811	0.344269769	4480.198018	0.070923733	0.705857022	1.52694621	1.738326742	4.611414083	0.042452153
San Bernardino (SC)	2024	LHDT2	Aggregate	5	Diesel	1.252068133	2.085807865	0.085167002	0.089017876	1408.388551	0.017902227	0.22189219	0.385424409	0.438780065	1.209349331	0.013345197
San Bernardino (SC)	2024	LHDT2	Aggregate	10	Diesel	47.29726474	1.889144945	0.070660793	0.073855761	1227.746949	0.015025085	0.193432032	0.323481231	0.368261876	0.979652962	0.011633526
San Bernardino (SC)	2024	LHDT2	Aggregate	15	Diesel	147.2675212	1.715199366	0.058765262	0.061422367	1048.47438	0.01269469	0.165187565	0.273309192	0.311144345	0.793852017	0.009934828
San Bernardino (SC)	2024	LHDT2	Aggregate	20	Diesel	1802.946368	1.570151164	0.048858573	0.051067741	907.6534172	0.010753143	0.143001166	0.231508837	0.26355742	0.640302534	0.008600477
San Bernardino (SC)	2024	LHDT2	Aggregate	25	Diesel	4966.988595	1.44625845	0.04059013	0.042425436	788.6117315	0.009111421	0.124246099	0.196163535	0.223319143	0.512527256	0.007472497
						Total	8.706561791	0.304041761	0.31778918	5380.875027	0.065486566	0.847759052	1.409887205	1.605062848	4.135684101	0.050986525
San Bernardino (SC)	2024	MHDT	Aggregate	5	Diesel	58.38572185	3.260081379	0.031983985	0.033430159	2413.646694	0.008215768	0.38027102	0.176883242	0.201368106	0.466695054	0.022855791
San Bernardino (SC)	2024	MHDT	Aggregate	10	Diesel	2274.688738	2.481582914	0.025949848	0.027123185	1997.609711	0.005539842	0.314724223	0.119271269	0.135781261	0.327388491	0.018916169
San Bernardino (SC)	2024	MHDT	Aggregate	15	Diesel	1973.800575	1.736774596	0.017016401	0.017785807	1571.091455	0.002796505	0.247526099	0.060207993	0.068542216	0.206500881	0.014877297
San Bernardino (SC)	2024	MHDT	Aggregate	20	Diesel	11374.02609	1.385712343	0.011002478	0.011499961	1338.255358	0.001383431	0.210842677	0.0297849	0.033907841	0.14686684	0.012672478
San Bernardino (SC)	2024	MHDT	Aggregate	25	Diesel	24175.03086	1.141462246	0.008537379	0.008923401	1207.805211	0.000989281	0.190290203	0.021298957	0.024247241	0.117723517	0.011437193
						Total	10.00561348	0.094490091	0.098762513	8528.408429	0.018924828	1.343654221	0.407446361	0.463846666	1.265174783	0.080758928
Running Emissions 5-25 MP	'H Averaged					HHDT LHDT1	NOx_RUNEX 6.2381 1.9919	PM2.5_RUNEX 0.0091 0.0659	PM10_RUNEX 0.0095 0.0689	CO2_RUNEX 2462.3790 896.0396	CH4_RUNEX 0.0027 0.0142	N2O_RUNEX 0.3879 0.1412	ROG_RUNEX 0.0571 0.3054	TOG_RUNEX 0.0650 0.3477	CO_RUNEX 0.5512 0.9223	SOx_RUNEX 0.0233 0.0085
						LHDT2 MHDT	1.7413 2.0011	0.0608 0.0189	0.0636 0.0198	1076.1750 1705.6817	0.0131 0.0038	0.1696 0.2687	0.2820 0.0815	0.3210 0.0928	0.8271 0.2530	0.0102 0.0162

Lilac and Santa Ana Warehouse Project Summary of Emissions in Pounds

Diesel Truck Idling Emissions

		Emissions	Emissions	Emissions	Max Emissions in	
Segment - On-site Truck Idle		(g/day)	(lb/day)	(lb/year)	an Hour (lbs/hr)	
On-site Idling – Location 1		3.04124914	0.006698787	2.445057128	0.000669879	Truck Parking
On-site Idling – Location 2		3.04124914	0.006698787	2.445057128	0.000669879	Docking Area
On-site Idling – Location 3		6.082498279	0.013397573	4.890114256	0.001339757	Gate
	Subtotal Idle	12.16499656	0.026795147	9.780228511		

Diesel Truck On-site Travel Emissions (5 mph)

			Emissions	Emissions	Emissions	Max Emissions in
Segment	Source ID	Source Group	(g/day)	(lb/day)	(lb/year)	an Hour (lbs/hr)
On-site Truck Route 1	ONSITE1	ONSITE1	0.800023531	0.001762166	0.643190725	0.000176217
	Subtot	al On-site Travel	0.800023531	0.001762166	0.643190725	

Diesel Truck Localized Off-site Travel Emissions (5-25 mph aggregated)

			Emissions	Emissions	Emissions	Max Emissions in
Segment	Source ID	Source Group	(g/day)	(lb/day)	(lb/year)	an Hour (lbs/hr)
Off-site Truck Route 1	SLINE1	Off1	0.558680028	0.001230573	0.449159054	0.000205095
Off-site Truck Route 2	SLINE2	Off2	0.126326383	0.000278252	0.10156196	4.63753E-05
Off-site Truck Route 3	SLINE3	Off3	0.578897641	0.001275105	0.465413302	0.000212517
	Subtot	al Off-site Travel	1.263904052	0.00278393	1.016134315	

Notes: Divided pounds per day by 10 hours to estimate maximum pounds in an hour.

Health Risk Summary (Summary of HARP2 Results)

Lilac Avenue and Santa Ana Avenue Warehouse Project

MAXHI MAXHI

Cancer

RISK_SUM Risk/million NonCancer Chronic

Acute 0.00E+00

Maximum Risk

2.749E-06

2.7494

6.22E-04

Operational MIR UTM 464801.43

Χ 3768399.97

Receptor # 95

MIR = Maximally Impacted Receptor

*HARP - HRACalc v22118 11/11/2022 10:24:03 AM - Cancer Risk - Input File: G:\BACKUP\57800001_Lilac Ave\HARP_Ops\LILAC_OPS\hra\Lilac_OpsHRAInput.hra *HARP - HRACalc v22118 11/11/2022 10:24:03 AM - Chronic Risk - Input File: G:\BACKUP\57800001_Lilac Ave\HARP_Ops\LILAC_OPS\hra\Lilac_OpsHRAInput.hra *HARP - HRACalc v22118 11/11/2022 10:24:03 AM - Acute Risk - Input File: G:\BACKUP\57800001_Lilac Ave\HARP_Ops\LILAC_OPS\hra\Lilac_OpsHRAInput.hra

						MAXHI	MAXHI
REC	GRP	Х	Υ	RISK_SUM	SCENARIO	NonCancerChronic	Acute
1	ALL	465438.9	3768852.91	4.6441E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.05E-04	0.00E+00
2	ALL	465400.61	3768868.7	4.2891E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.70E-05	0.00E+00
3	ALL	465362.33	3768884.49	3.9274E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	8.88E-05	0.00E+00
4	ALL	465324.04	3768900.29	3.5518E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	8.03E-05	0.00E+00
5	ALL	465285.75	3768916.08	3.2130E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.27E-05	0.00E+00
6	ALL	465247.46	3768931.87	2.9236E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.61E-05	0.00E+00
7	ALL	465209.17	3768947.66	2.6875E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.08E-05	0.00E+00
8	ALL	465170.88	3768963.45	2.5278E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.72E-05	0.00E+00
9	ALL	465132.59	3768979.24	2.3967E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.42E-05	0.00E+00
10	ALL	465094.3	3768995.03	2.3567E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.33E-05	0.00E+00
11	ALL	465056.01	3769010.82	2.2365E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.06E-05	0.00E+00
12	ALL	465017.72	3769026.61	2.0922E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.73E-05	0.00E+00
13	ALL	465598.49	3768493.26	8.4566E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.91E-04	0.00E+00
14	ALL	465572.55	3768556.6	7.6087E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.72E-04	0.00E+00
15	ALL	465546.61	3768619.94	7.1579E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.62E-04	0.00E+00
16	ALL	465520.67	3768683.27	6.9907E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.58E-04	0.00E+00
17	ALL	465494.73	3768746.61	6.5042E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.47E-04	0.00E+00
18	ALL	465468.8	3768809.95	5.4185E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.23E-04	0.00E+00
19	ALL	465637.12	3768362.88	6.1943E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.40E-04	0.00E+00
20	ALL	465636.55	3768292.11	5.0797E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.15E-04	0.00E+00
21	ALL	465635.99	3768221.35	4.3747E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.89E-05	0.00E+00
22	ALL	465635.42	3768150.58	3.8320E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	8.67E-05	0.00E+00
23	ALL	464999.28	3767925	9.3568E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.12E-04	0.00E+00
24	ALL	464938.54	3767910.15	9.1591E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.07E-04	0.00E+00
25	ALL	464900.24	3767910.15	9.1911E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.08E-04	0.00E+00
26	ALL	464861.93	3767910.15	9.0110E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.04E-04	0.00E+00
27	ALL	464807.65	3767900.62	8.1719E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.85E-04	0.00E+00
28	ALL	464976.85	3767840.15	6.6512E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.50E-04	0.00E+00
29	ALL	464938.54	3767840.15	6.8075E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.54E-04	0.00E+00
30	ALL	464900.24	3767840.15	6.8754E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.56E-04	0.00E+00
31	ALL	464861.93	3767840.15	6.8357E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.55E-04	0.00E+00
32	ALL	464823.62	3767840.15	6.7018E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.52E-04	0.00E+00
33	ALL	464994.12	3767733.63	4.5785E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.04E-04	0.00E+00
34	ALL	464955.82	3767733.63	4.6906E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.06E-04	0.00E+00
35 36	ALL	464917.51	3767733.63	4.7686E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.08E-04	0.00E+00
	ALL	464879.2	3767733.63	4.8111E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.09E-04	0.00E+00
37	ALL	464840.89	3767733.63	4.8057E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.09E-04	0.00E+00
38 39	ALL ALL	465051.63	3767706.48	4.0491E-07 4.2029E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	9.16E-05	0.00E+00
39 40		465113.76	3767740.76		30YrCancerHighEnd_InhSoilDermMMilkCrops	9.51E-05	0.00E+00
40	ALL ALL	464983.03 464936.48	3767709.42 3767709.42	4.2949E-07 4.4015E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops 30YrCancerHighEnd_InhSoilDermMMilkCrops	9.71E-05 9.96E-05	0.00E+00 0.00E+00
41		464900.24					
43	ALL ALL	464861.93	3767700.15 3767700.15	4.3425E-07 4.3664E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops 30YrCancerHighEnd_InhSoilDermMMilkCrops	9.82E-05 9.88E-05	0.00E+00 0.00E+00
44	ALL	464823.62	3767700.15	4.3551E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	9.85E-05	0.00E+00
44 45	ALL	465048.45	3767700.15	4.3551E-07 3.1994E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.24E-05	0.00E+00 0.00E+00
46	ALL	465081.75	3767627.58	3.1994E-07 3.2242E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.29E-05	0.00E+00
47	ALL	465115.04	3767641.29	3.2242E-07 3.2478E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.29E-03 7.35E-05	0.00E+00
48	ALL	465148.33	3767655	3.2478E-07 3.2571E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.37E-05	0.00E+00
49	ALL	465181.63	3767668.71	3.2571E 07 3.2578E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.37E-05	0.00E+00
50	ALL	465214.92	3767682.43	3.2510E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.35E-05	0.00E+00
51	ALL	465248.21	3767696.14	3.2349E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.32E-05	0.00E+00

52	ALL	464982.61	3767606.51	3.2707E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.40E-05	0.00E+00
53	ALL	464938.54	3767600.15	3.2937E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.45E-05	0.00E+00
54	ALL	464892.36	3767603.48	3.3711E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.62E-05	0.00E+00
55	ALL	464867.38	3767606.51	3.4146E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.72E-05	0.00E+00
56	ALL	464843.61	3767605	3.4133E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	7.72E-05	0.00E+00
					• = .		
57	ALL	465048.75	3767513.98	2.5603E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.79E-05	0.00E+00
58	ALL	465082.34	3767527.82	2.5817E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.84E-05	0.00E+00
59	ALL	465115.93	3767541.65	2.5983E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.88E-05	0.00E+00
60	ALL	465149.51	3767555.49	2.6098E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.90E-05	0.00E+00
61	ALL	465183.1	3767569.32	2.6158E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	5.92E-05	0.00E+00
62	ALL	465216.69	3767583.16	2.6144E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	5.91E-05	0.00E+00
63	ALL	465250.28	3767596.99	2.6119E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.91E-05	0.00E+00
64	ALL	465283.87	3767610.83	2.5964E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.87E-05	0.00E+00
65	ALL	465317.46	3767624.66	2.5750E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.82E-05	0.00E+00
66	ALL	465351.05	3767638.49	2.5502E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	5.77E-05	0.00E+00
67	ALL	465384.64	3767652.33	2.5176E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.69E-05	0.00E+00
68	ALL	465418.22	3767666.16	2.4777E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.60E-05	0.00E+00
69	ALL	465465.91	3767713.47	2.5299E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.72E-05	0.00E+00
70	ALL	465480.02	3767746.95	2.6275E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.94E-05	0.00E+00
71	ALL	465494.12	3767780.43	2.7210E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	6.15E-05	0.00E+00
72	ALL	465508.22	3767813.91	2.8162E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.37E-05	0.00E+00
73							
	ALL	465522.32	3767847.38	2.9074E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.58E-05	0.00E+00
74	ALL	465536.43	3767880.86	2.9967E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.78E-05	0.00E+00
75	ALL	465550.53	3767914.34	3.0834E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.97E-05	0.00E+00
76	ALL	465564.63	3767947.81	3.1671E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.16E-05	0.00E+00
77	ALL	465578.73	3767981.29	3.2499E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.35E-05	0.00E+00
78	ALL	465592.83	3768014.77	3.3348E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.54E-05	0.00E+00
79							
	ALL	465606.94	3768048.25	3.4212E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.74E-05	0.00E+00
80	ALL	465621.04	3768081.72	3.5114E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	7.94E-05	0.00E+00
81	ALL	465015.16	3767500.15	2.5344E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.73E-05	0.00E+00
82	ALL	464976.85	3767500.15	2.5816E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.84E-05	0.00E+00
83	ALL	464938.54	3767500.15	2.6246E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.94E-05	0.00E+00
84	ALL	464900.24	3767500.15	2.6612E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.02E-05	0.00E+00
85	ALL	464861.93	3767500.15	2.6864E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.08E-05	0.00E+00
86	ALL	464823.62	3767500.15	2.6990E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.10E-05	0.00E+00
87	ALL	464788.62	3768120.42	1.7993E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.07E-04	0.00E+00
88	ALL	464774.65	3768159.86	1.8740E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.24E-04	0.00E+00
89	ALL	464789.19	3768192.88	2.2536E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.10E-04	0.00E+00
90	ALL	464784.13	3768217	2.2944E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.19E-04	0.00E+00
91	ALL	464779.42	3768254.66	2.3566E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.33E-04	0.00E+00
92	ALL	464784.37	3768288.45	2.5292E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	5.72E-04	0.00E+00
93	ALL	464791.09	3768316.44	2.6987E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	6.10E-04	0.00E+00
94	ALL	464790.6	3768374.03	2.5892E-06	30YrCancerHighEnd InhSoilDermMMilkCrops	5.86E-04	0.00E+00
95	ALL	464801.43	3768399.97	2.7494E-06	30YrCancerHighEnd InhSoilDermMMilkCrops	6.22E-04	0.00E+00
96	ALL	464728.78	3768096.04	1.2374E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.80E-04	0.00E+00
97	ALL	464773.93	3768035.85	1.2428E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.81E-04	0.00E+00
98	ALL	464712.14	3768162.54	1.3194E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.98E-04	0.00E+00
99	ALL	464735.57	3768216.58	1.6501E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	3.73E-04	0.00E+00
100	ALL	464709.14	3768225.03	1.4232E-06	30YrCancerHighEnd InhSoilDermMMilkCrops	3.22E-04	0.00E+00
101	ALL	464730.05	3768252.5	1.6612E-06	30YrCancerHighEnd InhSoilDermMMilkCrops	3.76E-04	0.00E+00
			3768280.24		30YrCancerHighEnd InhSoilDermMMilkCrops		
102	ALL	464730.85		1.7018E-06		3.85E-04	0.00E+00
103	ALL	464724.95	3768318.27	1.6497E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	3.73E-04	0.00E+00
104	ALL	464705.67	3768399.55	1.4503E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	3.28E-04	0.00E+00
105	ALL	464744.82	3768399.23	1.8218E-06	30YrCancerHighEnd_InhSoilDermMMilkCrops	4.12E-04	0.00E+00
106	ALL	464699.8	3768055.38	9.9069E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	2.24E-04	0.00E+00
107	ALL	464790.49	3767993.95	1.1232E-06	30YrCancerHighEnd InhSoilDermMMilkCrops	2.54E-04	0.00E+00
108	ALL	464655.84	3768110.91	9.2697E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.10E-04	0.00E+00
109	ALL	464594.11	3768086.89	7.0481E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.59E-04	0.00E+00
110	ALL	464650.18	3768032.06	7.8512E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.78E-04	0.00E+00
111	ALL	464704.36	3767959.82	7.8742E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.78E-04	0.00E+00
112	ALL	464763.99	3767934.99	8.5068E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.92E-04	0.00E+00
					30YrCancerHighEnd InhSoilDermMMilkCrops		
113	ALL	464586.34	3768157.16	7.4342E-07	• = .	1.68E-04	0.00E+00
114	ALL	464586.63	3768193.39	7.6821E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.74E-04	0.00E+00
115	ALL	464586.91	3768229.62	7.8806E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.78E-04	0.00E+00
116	ALL	464587.19	3768265.85	8.0217E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.81E-04	0.00E+00
117	ALL	464598.9	3768316.69	8.5269E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.93E-04	0.00E+00
118	ALL	464598.92	3768333.88	8.5470E-07	30YrCancerHighEnd InhSoilDermMMilkCrops	1.93E-04	0.00E+00
					• = .		
119	ALL	464584.66	3768400.53	8.5837E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.94E-04	0.00E+00
120	ALL	464599.22	3768401.31	9.0757E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	2.05E-04	0.00E+00
121	ALL	464557.17	3768089.1	6.2192E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.41E-04	0.00E+00
122	ALL	464594.54	3768040.2	6.5948E-07	30YrCancerHighEnd_InhSoilDermMMilkCrops	1.49E-04	0.00E+00
					- '		

HARP2 - HRACalc (dated 22118) 11/11/2022 10:24:03 AM - Output Log

RISK SCENARIO SETTINGS

Receptor Type: Resident

Scenario: All

Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25

Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25

0<2 Years Bin: 2
2<9 Years Bin: 0
2<16 Years Bin: 14
16<30 Years Bin: 14
16 to 70 Years Bin: 0</pre>

PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True

Soil: True Dermal: True

Mother's milk: True

Water: False Fish: False

Homegrown crops: True

Beef: False Dairy: False Pig: False Chicken: False Egg: False

INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors

Worker adjustment factors enabled: NO

Fraction at time at home 3rd Trimester to 16 years: OFF

16 years to 70 years: OFF

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02 Soil mixing depth (m): 0.01

Dermal climate: Mixed

HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden

Fraction leafy: 0.137 Fraction exposed: 0.137 Fraction protected: 0.137

Fraction root: 0.137

TIER 2 SETTINGS

HRA ran successfully

Tier2 adjustments were used in this assessment. Please see the input file for details. Tier2 - What was changed: ED or start age changed Calculating cancer risk Cancer risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP Ops\LILAC OPS\hra\Lilac OpsCancerRisk.csv Cancer risk total by receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP Ops\LILAC OPS\hra\Lilac OpsCancerRiskSumByRec.csv Calculating chronic risk Chronic risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP Ops\LILAC OPS\hra\Lilac OpsNCChronicRisk.csv Chronic risk total by receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP Ops\LILAC OPS\hra\Lilac OpsNCChronicRiskSumByRec.csv Calculating acute risk Acute risk breakdown by pollutant and receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP Ops\LILAC OPS\hra\Lilac OpsNCAcuteRisk.csv Acute risk total by receptor saved to: G:\BACKUP\57800001 Lilac Ave\HARP_Ops\LILAC_OPS\hra\Lilac_OpsNCAcuteRiskSumByRec.csv

Output Pathway

AERMOD

Tabular Printed Outputs

Short Term Averaging				Hig		TABLE alues Ta	able		MAXTABLE Maximum	DAYTABLE Daily		
Period	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	Values Table	Values Table
1												No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: LILAC OPERATIONS.AD

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
1	Off1	1st	01H1G001.PLT
1	Off2	1st	01H1G002.PLT
1	Off3	1st	01H1G003.PLT
1	OnTravel	1st	01H1G004.PLT
1	Parking	1st	01H1G005.PLT
1	Docking	1st	01H1G006.PLT
1	Gate	1st	01H1G007.PLT
Annual	ALL	N/A	AN00GALL.PLT
Annual	Off1	N/A	AN00G001.PLT
Annual	Off2	N/A	AN00G002.PLT
Annual	Off3	N/A	AN00G003.PLT
Annual	OnTravel	N/A	AN00G004.PLT
Annual	Parking	N/A	AN00G005.PLT
Annual	Docking	N/A	AN00G006.PLT
Annual	Gate	N/A	AN00G007.PLT

Results Summary

C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000

DPM - Concentration - Source Group: ALL

Averaging Period	Rank	Peak Units		X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	848.42822	ug/m^3	464816.20	3768462.34	305.87	0.00	305.87	6/24/2011, 6
ANNUAL		175.28149	ug/m^3	464801.43	3768399.97	305.00	0.00	305.00	

DPM - Concentration - Source Group: DOCKING

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	217.29891	ug/m^3	464801.43	3768399.97	305.00	0.00	305.00	6/24/2011, 6
ANNUAL		22.40274	ug/m^3	464789.20	3768247.23	302.70	0.00	302.70	

DPM - Concentration - Source Group: GATE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	267.70858	ug/m^3	464800.97	3768504.80	306.00	0.00	306.00	6/24/2011, 6
ANNUAL		24.36126	ug/m^3	464801.43	3768399.97	305.00	0.00	305.00	

DPM - Concentration - Source Group: OFF1

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	145.01587	ug/m^3	465637.12	3768362.88	304.55	0.00	304.55	5/30/2012, 6
ANNUAL		32.31887	ug/m^3	465598.49	3768493.26	306.00	0.00	306.00	

Results Summary

C:\Users\kjohnson\OneDrive - ADEC Solutions USA, Inc\Desktop\5780000

DPM - Concentration - Source Group: OFF2

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	324.18951	ug/m^3	464555.31	3768450.28	307.00	0.00	307.00	6/19/2013, 6
ANNUAL		102.87261	ug/m^3	464555.31	3768450.28	307.00	0.00	307.00	

DPM - Concentration - Source Group: OFF3

1	Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
	1-HR	1ST	112.49885	ug/m^3	465598.49	3768493.26	306.00	0.00	306.00	6/12/2012, 6
	ANNUAL		23.21620	ug/m^3	465598.49	3768493.26	306.00	0.00	306.00	

DPM - Concentration - Source Group: ONTRAVEL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	131.28128	ug/m^3	464816.20	3768462.34	305.87	0.00	305.87	6/24/2011, 6
ANNUAL		17.56150	ug/m^3	464789.20	3768247.23	302.70	0.00	302.70	

DPM - Concentration - Source Group: PARKING

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	165.67890	ug/m^3	464801.43	3768399.97	305.00	0.00	305.00	6/24/2011, 6
ANNUAL		17.49817	ug/m^3	464789.20	3768247.23	302.70	0.00	302.70	

