



9th Street and Vineyard Avenue Warehouse

AIR QUALITY IMPACT ANALYSIS

CITY OF RANCHO CUCAMONGA

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LIST OF ABBREVIATED TERMS

(1)	Reference
µg/m ³	Microgram per Cubic Meter
AADT	Annual Average Daily Trips
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BACM	Best Available Control Measures
BMPs	Best Management Practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
EPA	Environmental Protection Agency
LST	Localized Significance Threshold
NAAQS	National Ambient Air Quality Standards
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
Pb	Lead
PM ₁₀	Particulate Matter 10 microns in diameter or less
PM _{2.5}	Particulate Matter 2.5 microns in diameter or less
PPM	Parts Per Million
Project	9th Street and Vineyard Avenue Warehouse
ROG	Reactive Organic Gases
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SRA	Source Receptor Area
TAC	Toxic Air Contaminant

TIA	Traffic Impact Analysis
TOG	Total Organic Gases
VMT	Vehicle Miles Traveled

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EXECUTIVE SUMMARY

The results of this *9th Street and Vineyard Avenue Warehouse Air Quality Impact Analysis* are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA for the Project.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
Regional Construction Emissions	3.4	<i>Less Than Significant</i>	<i>n/a</i>
Localized Construction Emissions	3.6	<i>Less Than Significant</i>	<i>n/a</i>
Regional Operational Emissions	3.5	<i>Less Than Significant</i>	<i>n/a</i>
Localized Operational Emissions	3.7	<i>Less Than Significant</i>	<i>n/a</i>
CO “Hot Spot” Analysis	3.8	<i>Less Than Significant</i>	<i>n/a</i>
Air Quality Management Plan	3.9	<i>Less Than Significant</i>	<i>n/a</i>
Sensitive Receptors	3.10	<i>Less Than Significant</i>	<i>n/a</i>
Odors	3.11	<i>Less Than Significant</i>	<i>n/a</i>
Cumulative Impacts	3.12	<i>Less Than Significant</i>	<i>n/a</i>

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1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the proposed 9th Street and Vineyard Avenue Warehouse (Project).

The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the proposed Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the South Coast Air Quality Management District (SCAQMD).

1.1 SITE LOCATION

The proposed 9th Street and Vineyard Avenue Warehouse site is located west of Vineyard Avenue and north of 9th Street in the City of Rancho Cucamonga, as shown on Exhibit 1-A.

1.2 PROJECT DESCRIPTION

The Project is proposed to consist of up to 236,534 square feet (sf) of warehouse use, as shown on Exhibit 1-B. The Project is anticipated to be constructed in a single phase by the year 2020.

1.3 STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMs)

Measures listed below (or equivalent language) shall appear on all Project grading plans, construction specifications and bid documents, and the City shall ensure such language is incorporated prior to issuance of any development permits.

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 1113 (Architectural Coatings) (2) and Rule 403 (Fugitive Dust) (3).

BACM AQ-1

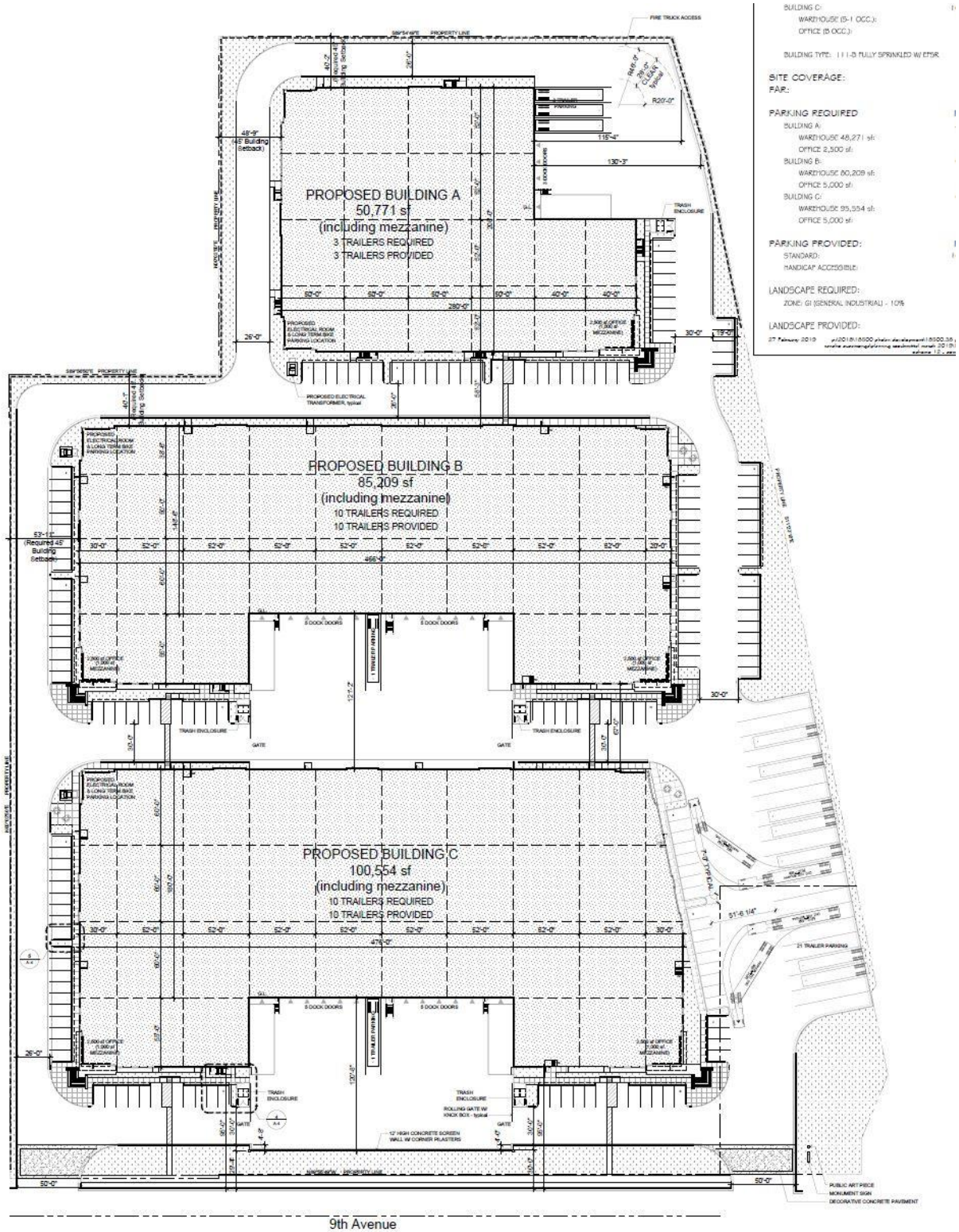
The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to (3):

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.

EXHIBIT 1-A: LOCATION MAP



EXHIBIT 1-B: SITE PLAN



BACM AQ-2

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 1113 (4):

- In order to limit the VOC content of architectural coatings used in the SCAB, architectural coatings shall be no more than a low VOC default level of 50 g/L unless otherwise specified in the SCAQMD Table of Standards (pg. 32-33).

1.4 CONSTRUCTION AND OPERATIONAL-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

The Project would not result in an exceedance of any localized or regional construction or operational-source emissions thresholds. As such, the Project would not result in any significant impacts and no mitigation measures are required.

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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (5). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As discussed above, the Project site is located within the SCAB, a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The larger South Coast district boundary includes 10,743 square miles.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14 ½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_x and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (6):

- Carbon Monoxide (CO): Is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- Sulfur Dioxide (SO₂): Is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfates (SO₄). Collectively, these pollutants are referred to as sulfur oxides (SO_x).
- Nitrogen Oxides (Oxides of Nitrogen, or NO_x): Nitrogen oxides (NO_x) consist of nitric oxide (NO), nitrogen dioxide (NO₂) and nitrous oxide (N₂O) and are formed when nitrogen (N₂) combines with oxygen (O₂). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO₂ is the most abundant in the atmosphere. As ambient concentrations of NO₂ are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO₂ than those indicated by regional monitoring station.
- Ozone (O₃): Is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.
- PM₁₀ (Particulate Matter less than 10 microns): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major

cause of reduce visibility (haze) which is caused by the scattering of light and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant.

- **$PM_{2.5}$ (Particulate Matter less than 2.5 microns):** A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.
- **Volatile Organic Compounds (VOC):** Volatile organic compounds are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3 , which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.
- **Reactive Organic Gases (ROG):** Similar to VOC, Reactive Organic Gases (ROG) are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROG are a criteria pollutant since they are a precursor to O_3 , which is a criteria pollutant. The SCAQMD uses the terms ROG and VOC (see previous) interchangeably.
- **Lead (Pb):** Lead is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. The major sources of lead emissions are ore and metals processing, particularly lead smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or lead acid battery manufacturing. As such, the Project is not anticipated to generate a quantifiable amount of lead emissions.

Health Effects of Air Pollutants

Ozone

Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. Short-term exposure (lasting for a few hours) to ozone at levels typically

observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high ozone levels.

Ozone exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

Carbon Monoxide

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (oxygen deficiency) as seen at high altitudes.

Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities.

Particulate Matter

A consistent correlation between elevated ambient fine particulate matter (PM₁₀ and PM_{2.5}) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in PM_{2.5} concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter.

The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM₁₀ and PM_{2.5}.

Nitrogen Dioxide

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

In animals, exposure to levels of NO₂ considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO₂.

Sulfur Dioxide

A few minutes of exposure to low levels of SO₂ can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂.

Animal studies suggest that despite SO₂ being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Lead

Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure.

Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid

gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.

Odors

The science of odor as a health concern is still new. Merely identifying the hundreds of VOCs that result in odors poses a big challenge. Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-1 (7).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table 2-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, PM₁₀, and PM_{2.5} are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status.

TABLE 2-1: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

TABLE 2-1: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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California Air Resources Board (5/4/16)

2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants: CO, Pb, O₃, PM₁₀, PM_{2.5}, NO₂, and SO₂ which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Lead (Pb) air monitoring sites throughout the air district (8). In 2017, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM₁₀, and PM_{2.5} at most monitoring locations. No areas of the SCAB exceeded federal or state standards for NO₂, SO₂, CO, sulfates or lead (8). See Table 2-2, for attainment designations for the SCAB (9) (10). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-2: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	Nonattainment (“Extreme”)
Ozone – 8-hour standard	Nonattainment	Nonattainment (“Extreme”)
PM ₁₀	Nonattainment	Attainment (Maintenance)
PM _{2.5}	Nonattainment	Nonattainment (“Serious”)
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable/Attainment
Lead ¹	Attainment	Nonattainment (Partial)

Source: State/Federal designations were taken from <http://www.arb.ca.gov/design/adm/adm.htm>

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB

2.7 LOCAL AIR QUALITY

The Project site is located within the Source Receptor Area (SRA) 32. Within SRA 32, the SCAQMD Northwest San Bernardino Valley monitoring station is located 0.92 miles northwest of the Project site and is the nearest long-term air quality monitoring site for O₃, CO, NO₂, and PM₁₀. The SCAQMD CA-60 Near Road monitoring station is located 4.55 miles south of the Project site and is the nearest monitoring site and provides data for PM_{2.5}. It should be noted that data from the CA-60 Near Road monitoring station was utilized in lieu of the Northwest San Bernardino Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available is shown on Table 2-3 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project site. Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} for 2015 through 2018 was obtained from the SCAQMD Air Quality Data Tables (11). Additionally,

¹ The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

TABLE 2-3: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2016-2018

POLLUTANT	STANDARD	YEAR		
		2016	2017	2018
Ozone				
Maximum Federal 1-Hour Concentration (ppm)		0.156	0.150	.133
Maximum Federal 8-Hour Concentration (ppm)		0.116	0.127	.111
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	88	87	52
Number of Days Exceeding State 8-Hour Standard	> 0.070 ppm	89	87	52
Carbon Monoxide (CO)				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.7	1.9	1.7
Maximum Federal 8-Hour Concentration	> 20 ppm	1.3	1.4	1.2
Nitrogen Dioxide (NO ₂)				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.070	0.064	0.059
Annual Federal Standard Design Value		16.5	15.3	14.7
Particulate Matter ≤ 10 Microns (PM ₁₀)				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	72	106	104
Annual Federal Arithmetic Mean (µg/m ³)		25.0	31.5	22.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	5	26	9
Particulate Matter ≤ 2.5 Microns (PM _{2.5})				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	44.1	44.8	47.9
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	14.7	14.4	14.3
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	6	7	5

Source: Data for O₃, CO, NO₂, PM₁₀, and PM_{2.5} was obtained from SCAQMD Air Quality Data Tables.

2.8 REGULATORY BACKGROUND

2.8.1 FEDERAL REGULATIONS

The U.S. EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and lead (12). The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (13). The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, PM_{2.5}, and lead. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}. Table 3-1 (previously presented) provides the NAAQS within the basin.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and nitrogen oxides (NO_x). NO_x is a collective term that includes all forms of nitrogen oxides (NO, NO₂, NO₃) which are emitted as byproducts of the combustion process.

2.8.2 CALIFORNIA REGULATIONS

California Air Resource Board (CARB). The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the SCAB because they

are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (14) (12).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROG_s, NO_x, CO and PM₁₀. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

Title 24 Energy Efficiency Standards and California Green Building 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 version of Title 24 will go into effect on January 1, 2020 and is applicable to the Project.

The CEC indicates that the 2019 Title 24 standards will require solar photovoltaic systems for new homes, establish requirements for newly constructed healthcare facilities, encourage demand responsive technologies for residential buildings, update indoor and outdoor lighting for nonresidential buildings. The CEC anticipates that single-family homes built with the 2019 standards will use approximately 7 percent less energy compared to the residential homes built under the 2016 standards. Additionally, after implementation of solar photovoltaic systems, homes built under the 2019 standards will about 53 percent less energy than homes built under the 2016 standards. Nonresidential buildings will use approximately 30 percent less energy due to lighting upgrades (15).

California Code of Regulations, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California

Building Standards Commission. CALGreen is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Local jurisdictions are permitted to adopt more stringent requirements, as state law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided they establish a minimum 65 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 must meet in order to be certified for occupancy, which is generally enforced by the local building official. CALGreen 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 new buildings with 10 or more 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).
- Construction waste. A minimum 65 percent diversion of construction and demolition waste from landfills, increasing voluntarily to 80 percent for new homes and commercial projects (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:
 - The installation of water-conserving fixtures (5.303.3) or
 - Using nonpotable water systems (5.303.4).
- Water use savings. 20 percent mandatory reduction of 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 sf 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 sf to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

2.8.3 AIR QUALITY MANAGEMENT PLANNING

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards (16). AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 3.9.

2.9 REGIONAL AIR QUALITY IMPROVEMENT

The Project is within the jurisdiction of the SCAQMD. In 1976, California adopted the Lewis Air Quality Management Act which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. The geographic area of which SCAQMD consists is known as the SCAB. SCAQMD develops comprehensive plans and regulatory programs for the region to attain federal standards by dates specified in federal law. The agency is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures.

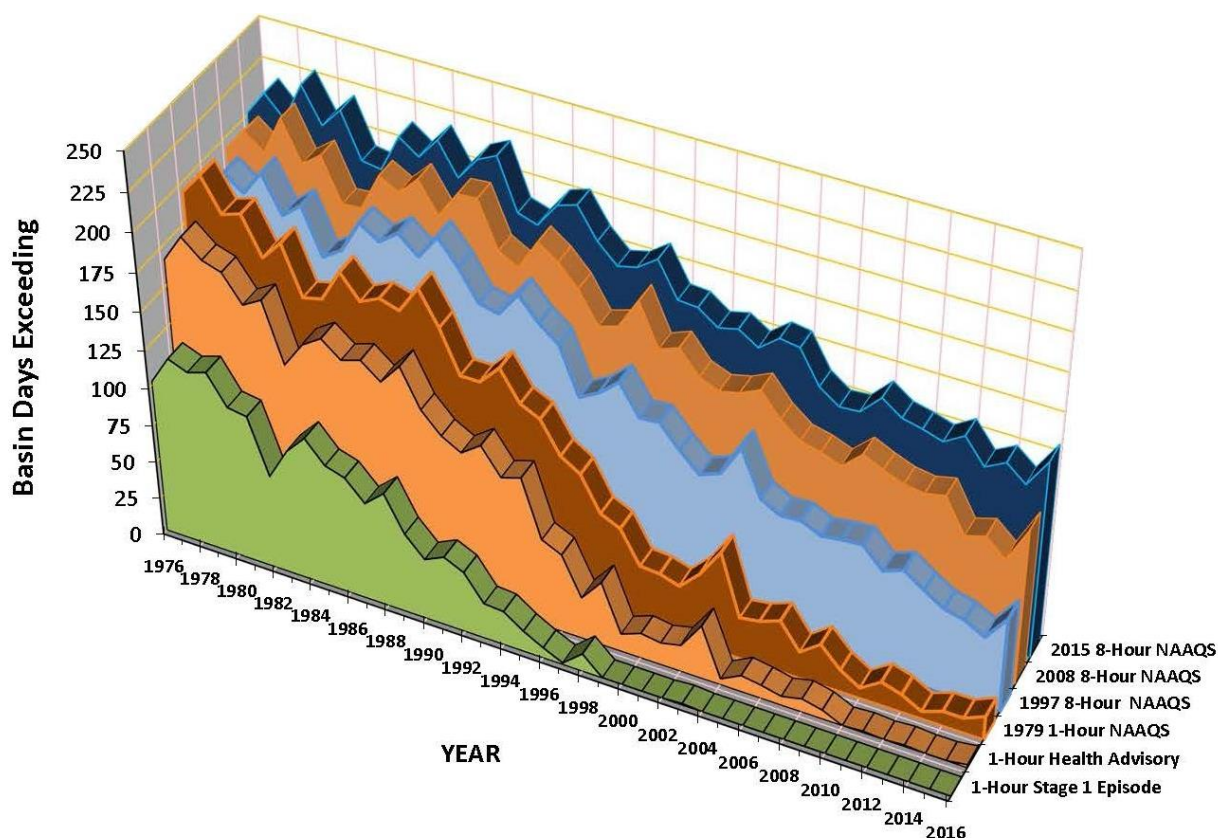
SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in Basin air quality. Nearly all control programs developed through the early 1990s relied on (i) the development and application of cleaner technology; (ii) add-on emission controls, and (iii) uniform CEQA review throughout the Basin. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB.

As discussed above, the SCAQMD is the lead agency charged with regulating air quality emission reductions for the entire Basin. SCAQMD created AQMPs which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the South Coast Basin. The 2012 AQMP states, “the remarkable historical improvement in air quality since the 1970’s is the direct result of Southern California’s comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs,” (17).

Ozone, NO_x, VOC, and CO have been decreasing in the Basin since 1975 and are projected to continue to decrease through 2020 (18). These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled in the Basin continue to increase, NO_x and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. Ozone contour maps show that the number of days exceeding the national 8-hour standard has decreased between 1997 and 2007. In the 2007 period, there was an overall decrease in exceedance days compared with the 1997 period. Ozone levels in the SCAB have decreased substantially over the last 30 years as shown in Table 2-4 (19). Today, the maximum measured concentrations are approximately one-third of concentrations within the late 70’s.

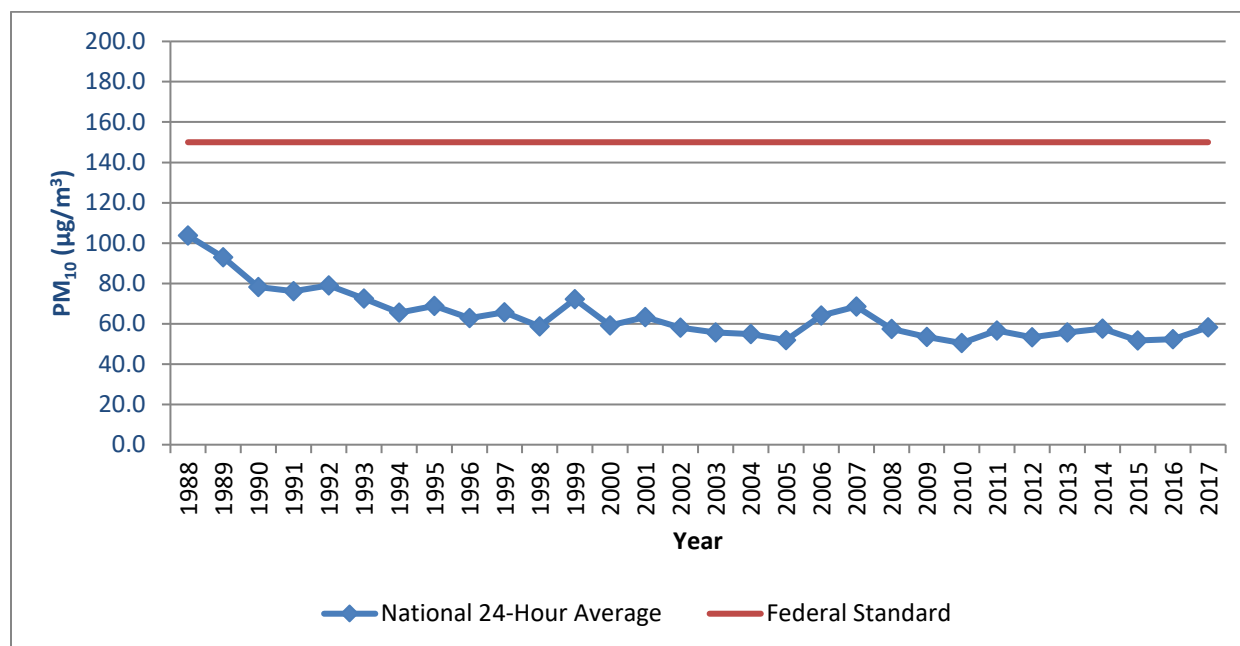
The overall trends of PM₁₀ and PM_{2.5} levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM₁₀ have remained somewhat constant in the Basin and direct emissions of PM_{2.5} have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions.

TABLE 2-4: SCAB OZONE TREND

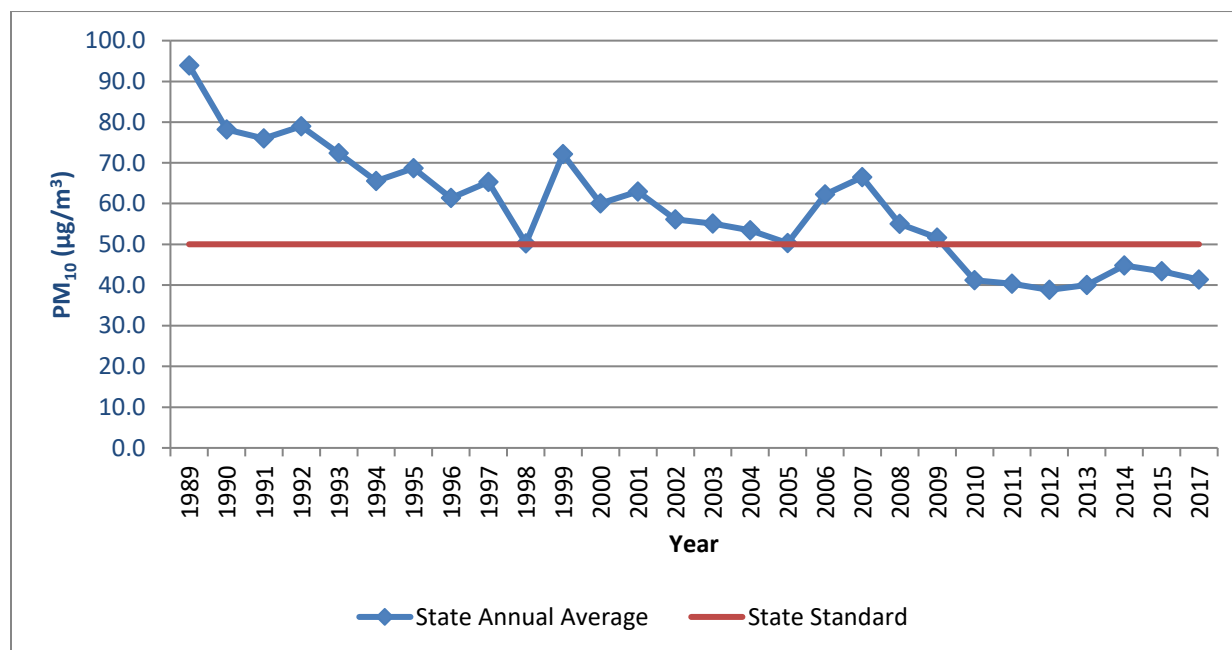


Source: Air Quality Management District

As with other pollutants, the most recent PM₁₀ statistics show an overall improvement as illustrated in Tables 2-5 and 2-6. During the period for which data are available, the 24-hour national annual average concentration for PM₁₀ decreased by approximately 44 percent, from 103.7 $\mu\text{g}/\text{m}^3$ in 1988 to 58.2 $\mu\text{g}/\text{m}^3$ in 2017 (20). Although the values are below the federal standard, it should be noted that there are days within the year where the concentrations will exceed the threshold. The 24-hour state annual average for emissions for PM₁₀, have decreased by approximately 56 percent since 1988 (20). Although data in the late 1990's show some variability, this is probably due to the advances in meteorological science rather than a change in emissions. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM₁₀ standards has also shown an overall drop.

TABLE 2-5: SCAB (NATIONAL 24-HOUR AVERAGE) PM₁₀ TREND¹

Source: California Air Resource Board

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.**TABLE 2-6: SCAB (STATE 24-HOUR AVERAGE) PM₁₀ TREND¹**

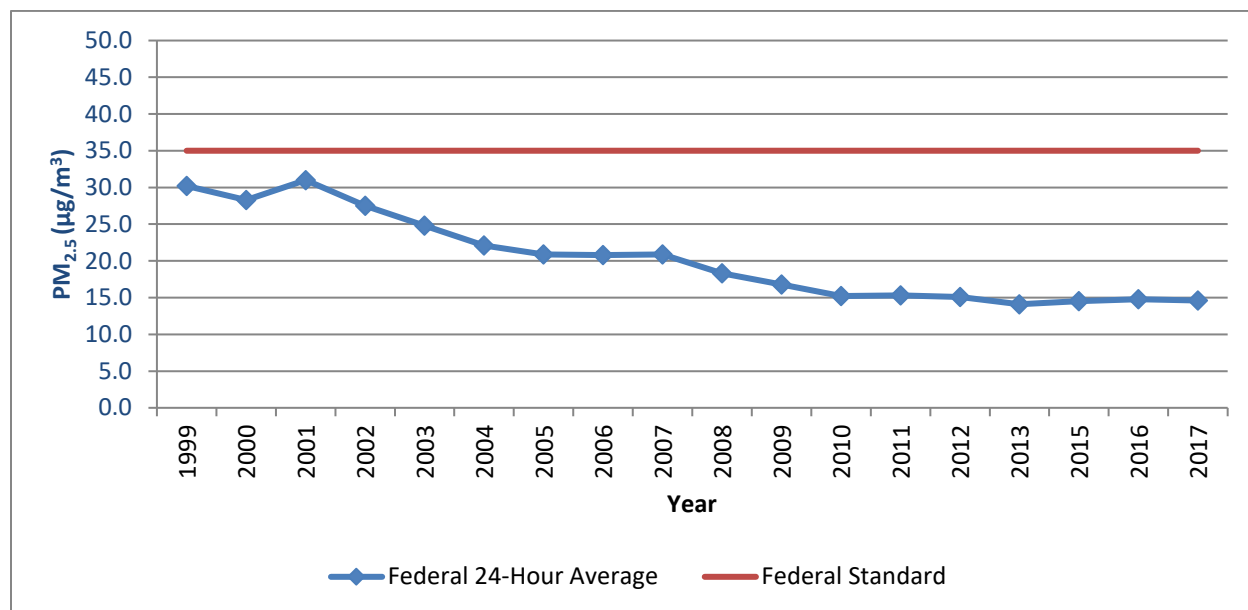
Source: California Air Resource Board

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

Tables 2-7 and 2-8 shows the most recent 24-hour average PM_{2.5} concentrations in the SCAB from 1999 through 2017. Overall, the national and state annual average concentrations have

decreased by almost 52 percent and 30 percent respectively (20). The SCAB is currently designated as nonattainment for the State and federal PM_{2.5} standards.

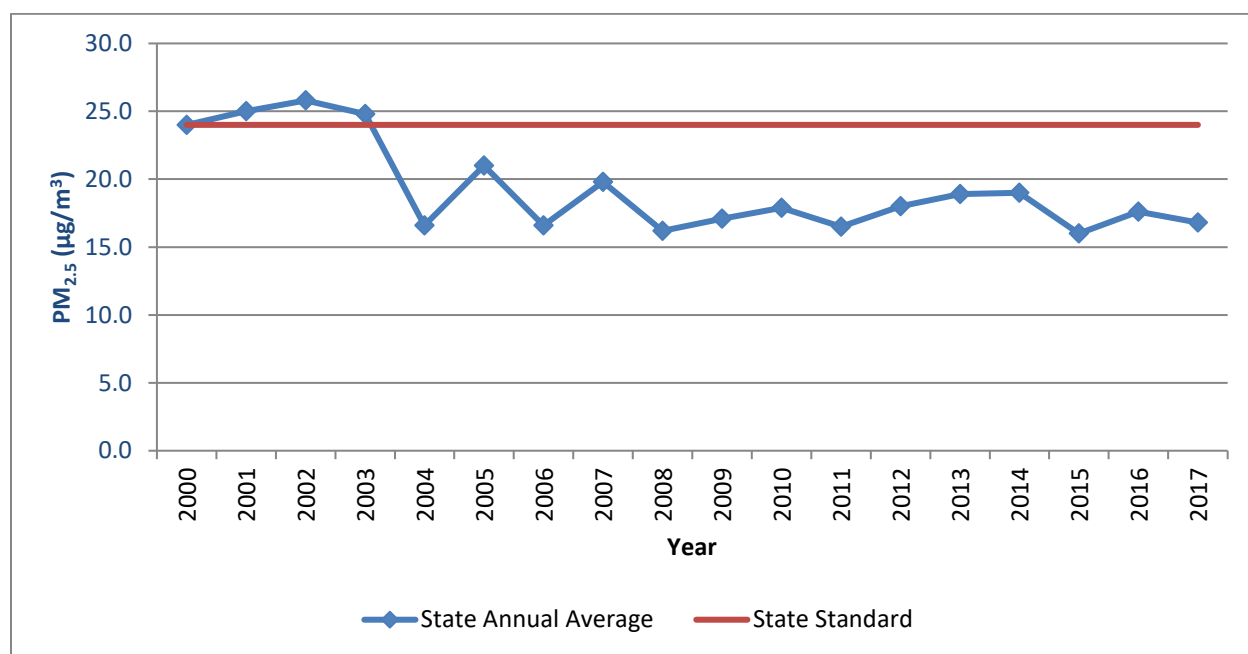
TABLE 2-7: SCAB (NATIONAL 24-HOUR AVERAGE) PM_{2.5} TREND¹



Source: California Air Resource Board

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

TABLE 2-8: SCAB (STATE 24-HOUR AVERAGE) PM_{2.5} TREND¹



Source: California Air Resource Board

¹ Some year have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

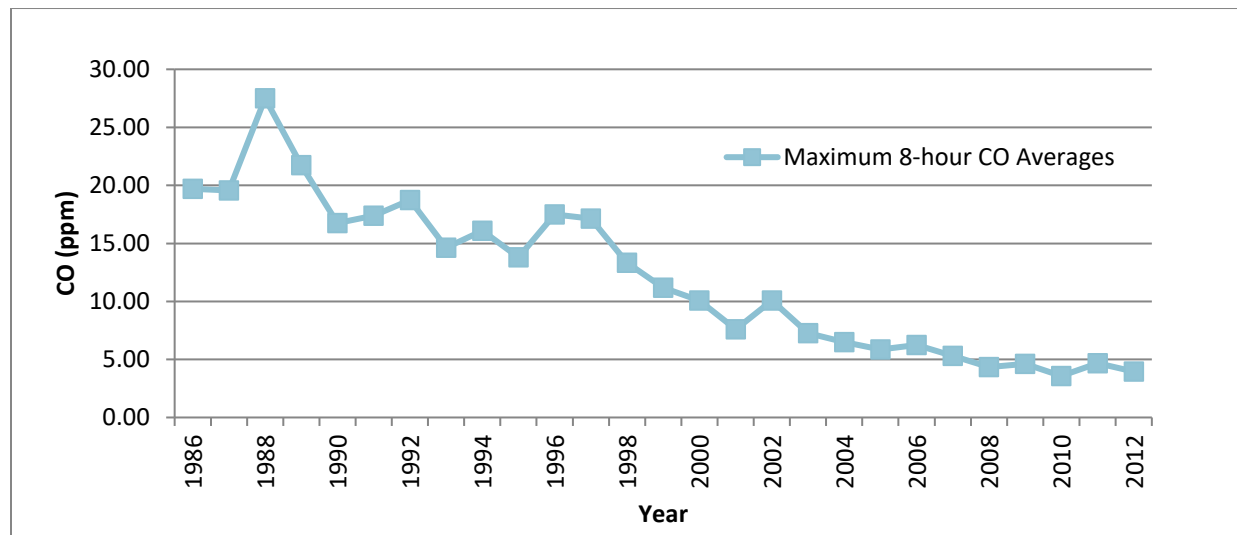
While the 2012 AQMP PM₁₀ attainment demonstration and the 2015 associated supplemental SIP submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, it could not anticipate the effect of the ongoing drought on the measured PM_{2.5}.

The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of PM_{2.5}-equivalent emission reductions continued through 2015, the severe drought conditions contributed to the PM_{2.5} increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour PM_{2.5} standard, SCAQMD submitted a request and the U.S. EPA approved, in January 2016, a “bump up” to the nonattainment classification from “moderate” to “serious,” with a new attainment deadline as soon as practicable, but not beyond December 31, 2019.

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (10). Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories (16).

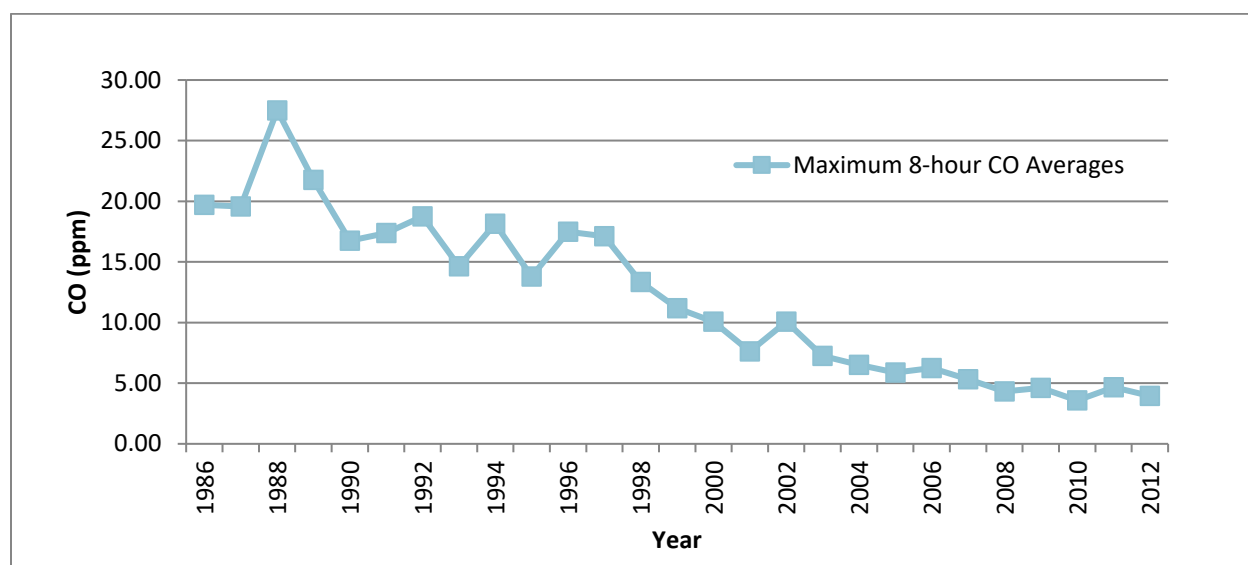
The most recent CO concentrations in the SCAB are shown in Tables 2-9 and 2-10 (20). CO concentrations in the SCAB have decreased markedly — a total decrease of about 80 percent in the peak 8-hour concentration since 1986. It should be noted 2012 is the most recent year where 8-hour CO averages and related statistics are available in the SCAB. The number of exceedance days has also declined. The entire SCAB is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

TABLE 2-9: SCAB (NATIONAL 24-HOUR AVERAGE) CARBON MONOXIDE TREND¹



Source: California Air Resource Board

¹ The most recent year where 8-hour concentration data is available is 2012.

TABLE 2-10: SCAB (STATE 24-HOUR AVERAGE) CARBON MONOXIDE TREND¹

Source: California Air Resource Board

¹ The most recent year where 8-hour concentration data is available is 2012.

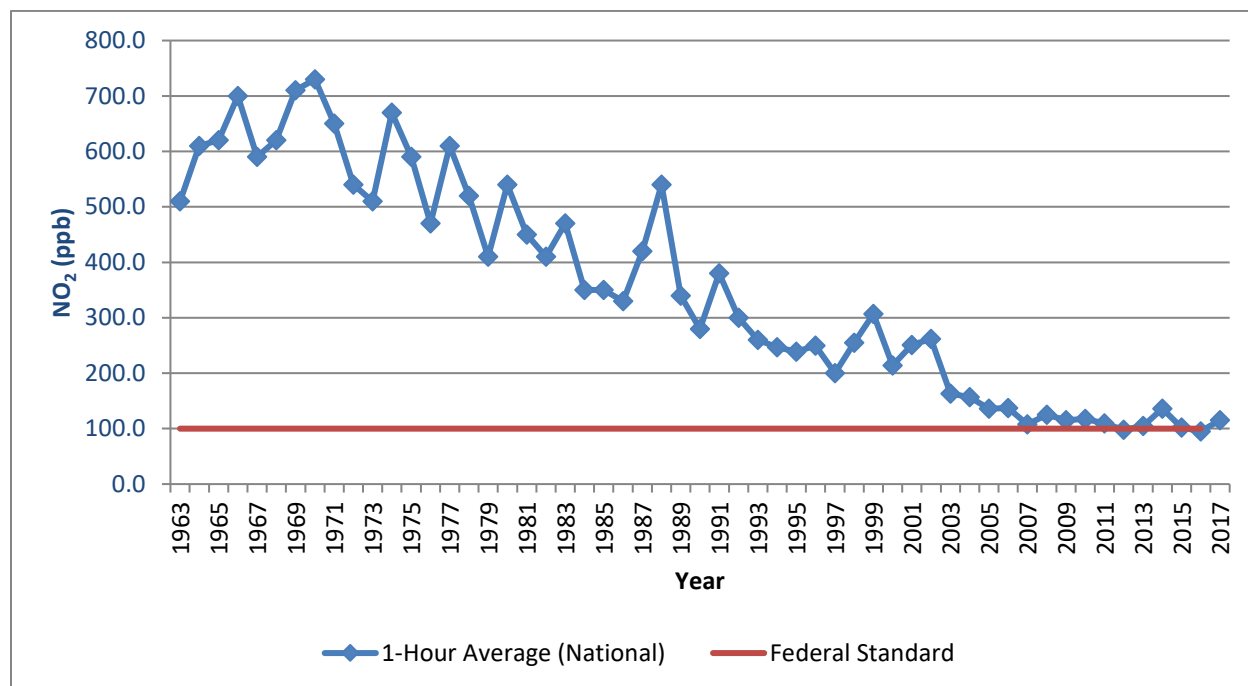
Part of the control process of the SCAQMD's duty to greatly improve the air quality in the Basin is the uniform CEQA review procedures required by SCAQMD's CEQA Handbook (21). The single threshold of significance used to assess Project direct and cumulative impacts has in fact "worked" as evidenced by the track record of the air quality in the Basin dramatically improving over the course of the past decades. As stated by the SCAQMD, the District's thresholds of significance are based on factual and scientific data and are therefore appropriate thresholds of significance to use for this Project.

The most recent NO₂ data for the SCAB is shown in Tables 2-11 and 2-12 (20). Over the last 50 years, NO₂ values have decreased significantly; the peak 1-hour national and state averages for 2017 is approximately 77 percent lower than what it was during 1963. The SCAB attained the State 1-hour NO₂ standard in 1994, bringing the entire State into attainment. A new state annual average standard of 0.030 parts per million was adopted by the ARB in February 2007 (22). The new standard is just barely exceeded in the South Coast. NO₂ is formed from NO_x emissions, which also contribute to ozone. As a result, the majority of the future emission control measures will be implemented as part of the overall ozone control strategy. Many of these control measures will target mobile sources, which account for more than three-quarters of California's NO_x emissions. These measures are expected to bring the South Coast into attainment of the State annual average standard.

The American Lung Association website includes data collected from State air quality monitors that are used to compile an annual State of the Air report. The latest State of the Air Report compiled for the Basin was in 2017 (23). As noted in this report, air quality in the Basin has significantly improved in terms of both pollution levels and high pollution days over the past three decades. The area's average number of high ozone days dropped from 38% regionally in the initial 2000 State of the Air report (1996–1998) to 69% in the 2004 report and continues to decrease

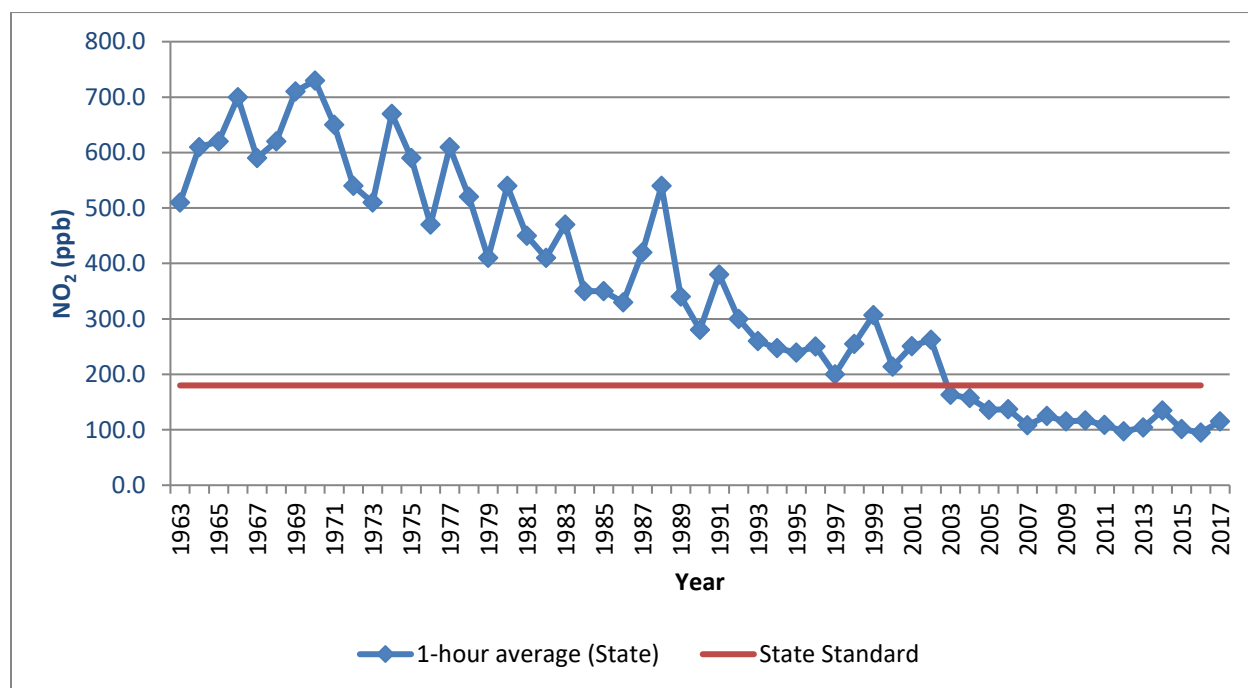
the number of days. The region has also seen dramatic reduction in particle pollution since the initial 2000 State of the Air report (23).

TABLE 2-11: SCAB (NATIONAL 24-HOUR AVERAGE) NITROGEN DIOXIDE TREND



Source: California Air Resource Board

TABLE 2-12: SCAB (STATE 24-HOUR AVERAGE) NITROGEN DIOXIDE TREND

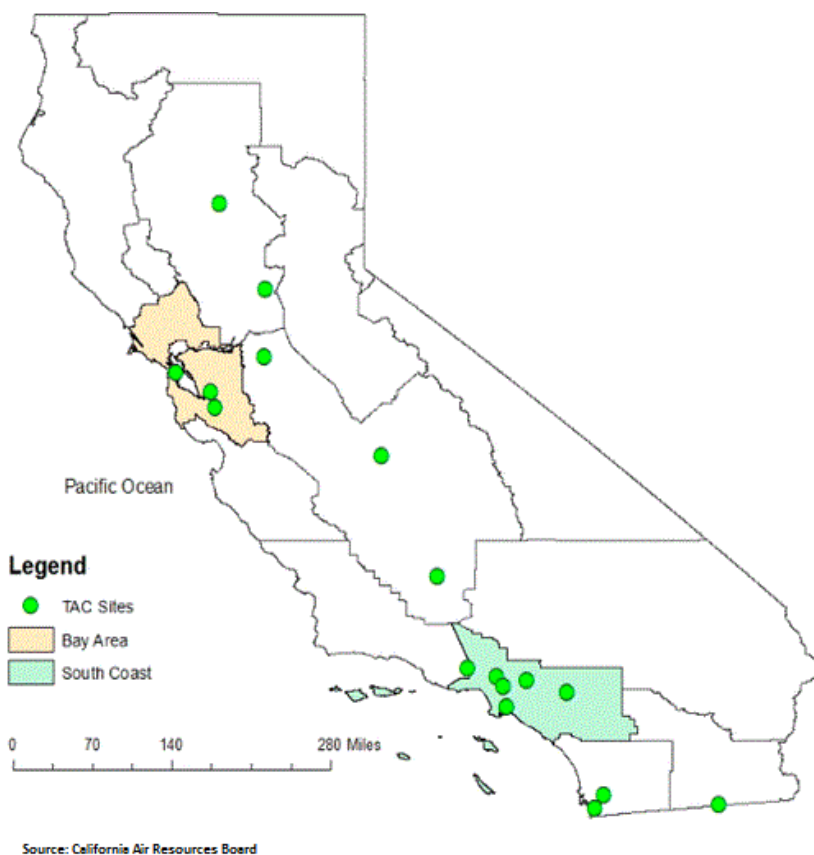


Source: California Air Resource Board

TOXIC AIR CONTAMINANTS (TACs) TRENDS

In 1984, as a result of public concern for exposure to airborne carcinogens, the CARB adopted regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article (24) which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly (between 1990 and 2012). The seven TACs studied include those that are derived from mobile sources: diesel particulate matter (DPM), benzene, and 1,3-butadiene; those that are derived from stationary sources: perchloroethylene and hexavalent chromium; and those derived from photochemical reactions of emitted VOCs: formaldehyde and acetaldehyde². TACs data was gathered at monitoring sites from both the Bay Area and SCAB, as shown on Exhibit 2-A; Several of the sites in the SCAB include Reseda, Compton, Rubidoux, Burbank, and Fontana. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

EXHIBIT 2-A: CALIFORNIA TOXIC AIR CONTAMINANT SITES



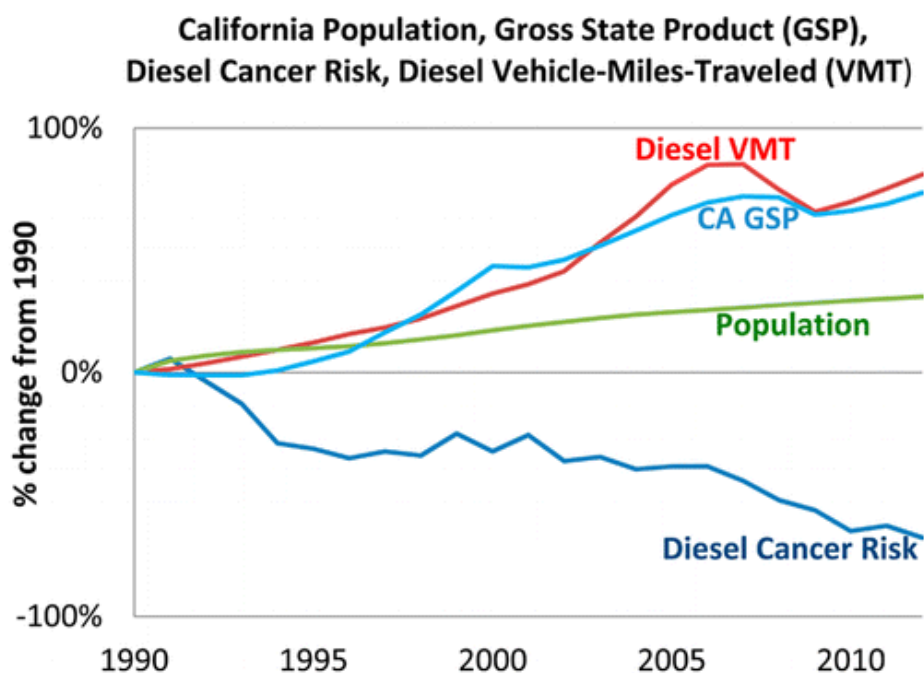
² It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

Mobile Source TACs

CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. In California, light-duty vehicles sold after 1996 are equipped with California's second-generation On-Board Diagnostic (OBD-II) system. The OBD II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. If a problem is detected, the OBD II system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase Check Engine or Service Engine Soon. The system will also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. ARB has recently developed similar OBD requirements for heavy-duty vehicles over 14,000 lbs. CARB's phase II Reformulated Gasoline (RFG-2) regulation, adopted in 1996, also led to a reduction of mobile source emissions. Through such regulations, benzene levels declined 88% from 1990-2012. 1,3-Butadiene concentrations also declined 85% from 1990-2012 as a result of the use of reformulated gasoline and motor vehicle regulations (24).

In 2000, CARB's Diesel Risk Reduction Plan (DRRP) recommended the replacement and retrofit of diesel-fueled engines and the use of ultra-low-sulfur (<15ppm) diesel fuel. As a result of these measures, DPM concentrations have declined 68% since 2000, even though the state's population increased 31% and the amount of diesel vehicles miles traveled increased 81%, as shown on Exhibit 2-B. With the implementation of these diesel-related control regulations, ARB expects a DPM decline of 71% for 2000-2020.

EXHIBIT 2-B: DIESEL PARTICULATE MATTER AND DIESEL VEHICLE MILES TREND



Source: California Air Resources Board

DIESEL REGULATIONS

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter (DPM). More specifically, the CARB Drayage Truck Regulation (25), the CARB statewide On-road Truck and Bus Regulation (26), and the Ports of Los Angeles and Long Beach “Clean Truck Program” (CTP) require accelerated implementation of “clean trucks” into the statewide truck fleet (27). In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, will dramatically be reduced due to the aforementioned regulatory requirements.

Diesel emissions identified in this analysis would therefore overstate future DPM emissions since not all the regulatory requirements are reflected in the modeling.

CANCER RISK TRENDS

Based on information available from CARB, overall cancer risk throughout the basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, the State of California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study, called MATES-II (for Multiple Air Toxics Exposure Study). Diesel particulate matter (DPM) accounts for more than 70 percent of the cancer risk.

In 2008 the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimates the average excess cancer risk level from exposure to TACs is an approximately 17% decrease in comparison to the MATES-II study.

Nonetheless, the SCAQMD’s most recent in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California was from the *Multiple Air Toxics Exposure Study in the SCAB, MATES IV*,” which shows that cancer risk has decreased more than 55% between MATES III (2005) and MATES IV (2015) (28).

MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV calculated cancer risks based on monitoring data collected at ten fixed sites within the SCAB (SCAB). None of the fixed monitoring sites are within the local area of the Project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 960.23 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68% of the total risk shown in MATES-IV. Cumulative Project generated TACs are limited to DPM.

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3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will violate an air quality standard or contribute to an existing or projected air quality violation. Additionally, the Project has been evaluated to determine if it will result in a cumulatively considerable net increase of a criteria pollutant for which the SCAB is non-attainment under an applicable federal or state ambient air quality standard. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The SCAQMD has developed regional significance thresholds for regulated pollutants, as summarized at Table 3-1 (29). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact. It should be noted that the SCAQMD provides a threshold for emissions of lead, however for purposes of this analysis no lead emissions are calculated as the Project-related construction and operational activities would not generate a quantifiable amount of lead emissions. Additionally, the air quality modeling program (discussed below) does not calculate any emissions of lead from typical construction or operational activities.

TABLE 3-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
Regional Thresholds		
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
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: Regional Thresholds presented in this table are based on the SCAQMD Air Quality Significance Thresholds, March 2015

3.3 CALIFORNIA EMISSIONS ESTIMATOR MODEL™ EMPLOYED TO ANALYZE AIR QUALITY

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to

calculate construction-source and operational-source criteria pollutant (VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (30). Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1 through 3.3.

3.4 CONSTRUCTION EMISSIONS

Construction activities associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Construction is expected to commence in August 2019 and will last through December 2020. The duration of construction activity was estimated based on consultation with the Project applicant and the 2020 opening year. The construction schedule utilized in the analysis, shown in Table 3-2, represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.³ A detailed summary of construction equipment, shown in Table 3-3, was estimated based on consultation with the Project applicant and CalEEMod model defaults. The site-specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated equipment both represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Please refer to specific detailed modeling inputs/outputs contained in Appendices 3.1 through 3.3.

³ As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2, Table 3.4 “OFFROAD Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-2: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	08/01/2019	08/28/2019	20
Site Preparation	08/29/2019	09/11/2019	10
Grading	09/12/2019	10/23/2019	30
Building Construction	10/24/2019	12/16/2020	300
Paving	11/26/2020	12/23/2020	20
Architectural Coating	11/26/2020	12/23/2020	20

TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity	Equipment	Number	Hours Per Day
Demolition	Concrete/Industrial Saws	1	8
	Excavators	3	8
	Rubber Tired Dozers	2	8
Site Preparation	Tractors/Loaders/Backhoes	4	8
	Rubber Tired Dozers	3	8
Grading	Tractors/Loaders/Backhoes	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Tractors/Loaders/Backhoes	3	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

The Project site is currently developed with existing residential and commercial structures. As per information provided by the Project applicant, the Project would require 4,169 tons of debris from the sources listed in Table 3-4. In order to account of fugitive dust emissions generated

during demolition activity, the amount of material demolished is entered in to CalEEMod in terms of “Tons of Debris” or “Building Square Footage”. For analytical purposes, 4,169 tons of debris has been modeled in CalEEMod. It should be noted that CalEEMod calculates emissions from dismemberment, site removal of debris, and hauling truck traffic on paved and unpaved roads (31).

Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions”. Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The CalEEMod model was utilized to calculate fugitive dust emissions resulting from this phase of activity. It is our understanding that the Project site is expected to balance (will not require any import or export of soil).

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information CalEEMod model defaults.

TABLE 3-4: DEMOLITION QUANTITIES

Source	Quantity (tons)
Trash to Landfill	299
Wood Salvaged for Reuse	195
Metal Recycled	150
C&D Recycled by MRF Site	25
Concrete Crushed for Reuse	3,500
Total (Tons of Debris)	4,169

3.4.1 CONSTRUCTION EMISSIONS SUMMARY

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 1113 (Architectural Coatings) (2) and Rule 403 (Fugitive Dust) (3). It should be noted that Best Available Control Measures (BACMs) are not mitigation as they are standard regulatory requirements. As such, calculation of construction emissions includes reductions for compliance with Rule 403 and Rule 1113.

Impacts without Mitigation

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would not exceed criteria pollutant thresholds established by the SCAQMD for emissions for any criteria pollutant. Therefore, a less than significant impact would occur, and no mitigation is required.

TABLE 3-5: EMISSIONS SUMMARY OF CONSTRUCTION (WITHOUT MITIGATION)

Year	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2019	4.85	54.59	34.19	0.07	11.07	6.28
2020	62.45	46.67	47.45	0.11	5.75	2.99
Maximum Daily Emissions	62.45	54.59	47.45	0.11	11.09	6.28
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions

3.5.1 AREA SOURCE EMISSIONS

Architectural Coatings

Over a period of time the building that is part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using the CalEEMod model.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within the CalEEMod model.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model.

3.5.2 ENERGY SOURCE EMISSIONS

Combustion Emissions Associated with Natural Gas and Electricity

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod model.

3.5.3 MOBILE SOURCE EMISSIONS

Vehicles

Project mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project.

Per the *9th Street and Vineyard Avenue Warehouse, Rancho Cucamonga, California - Trip Generation Analysis* (TG), the Project is expected to generate a total of approximately 414 two-way trips per day (actual vehicles) (32). The Project trip generation includes 86 two-way truck trips per day. The following truck fleet mix was obtained from the TG and utilized for the purposes of estimating the truck trip generation for the site: 16.94% of the total trucks as 2-axle trucks (LHD), 22.7% of the total trucks as 3-axle trucks (MHD), and 60.35% of the total trucks as 4+-axle trucks (HHD).

3.5.3.1 Trip Length

For passenger car trips, a one-way trip length of 16.6 miles was assumed as contained in the CalEEMod™ model defaults. For trucks, an average one-way trip length of 53.26 miles was derived from distances from the Project site to the far edges of the SCAB. Assuming 50% of trucks travel to the Port of Los Angeles and Port of Long Beach and the remaining 50% of trucks travel to either the Cajon Pass, Desert Center, Santa Clarita and/or the San Diego County Line, a weighted truck trip length of 53.26 miles was determined. For purposes of analysis, and as a conservative measure, a truck trip length of 55 miles was used. It is appropriate to stop the VMT calculation at the boundary of the SCAB because any activity beyond that boundary would be speculative and occur in a different Air Basin; this approach is also consistent with professional industry practice. The approach for analysis purposes in this AQIA report represents a conservative estimate of emissions and almost certainly overstates the emissions impact from the Project.

- Project site to the Port of Los Angeles/Long Beach: 58.25 miles;
- Project site to Banning Pass: 58.47 miles;
- Project site to San Diego County Line: 66.03 miles;
- Project site to Cajon Pass: 28.70 miles;

- Project site to Downtown Los Angeles: 39.90 miles;

Average Weighted Truck Trip Length = 53.26 miles

Truck Idling

Truck idling at the Project is another source of Project-related operational emissions. CalEEMod calculates evaporative emissions, starting and idling emissions multiplying the number of trips by the respective emission factor for each pollutant all of these processes are embedded in CalEEMod (31).

Fugitive Dust Related to Vehicular Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod model.

3.5.4 ON-SITE EQUIPMENT EMISSIONS

It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The cargo handling equipment is assumed to have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on the latest available information from SCAQMD (33); for example, high-cube warehouse projects typically have 3.6 yard trucks per million sf of building space. For this particular Project, based on the maximum square footage of the warehouse building space permitted by the proposed Project, on-site modeled operational equipment includes one 200 hp, non-diesel-powered yard tractors operating at 4 hours a day for 365 days of the year.

3.5.5 OPERATIONAL EMISSIONS SUMMARY

Impacts without Mitigation

The estimated maximum peak operational emissions are summarized on Table 3-6. Detailed operational model outputs are presented in Appendix 3.2 and 3.3. Under the assumed scenarios, emissions resulting from the Project operations would not exceed the applicable SCAQMD regional thresholds of significance for any criteria pollutant. Therefore, a less than significant impact would occur, and no mitigation measures are required.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS (WITHOUT MITIGATION)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	5.41	4.00E-04	0.04	0.00	1.50E-04	1.50E-04
Energy Source	0.01	0.13	0.11	7.70E-04	0.01	0.01
Mobile (Passenger Cars)	0.46	0.69	10.22	0.04	4.14	1.12
Mobile (Trucks)	1.30	36.20	10.12	0.14	4.43	1.41
On-Site Equipment	0.15	1.79	0.78	3.17E-03	0.06	0.05
Total Maximum Daily Emissions	7.32	38.81	21.28	0.18	8.64	2.59
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	5.41	4.00E-04	0.04	0.00	1.50E-04	1.50E-04
Energy Source	0.01	0.13	0.11	7.70E-04	0.01	0.01
Mobile (Passenger Cars)	0.42	0.75	9.08	0.03	4.14	1.12
Mobile (Trucks)	1.31	37.32	10.29	0.13	4.43	1.42
On-Site Equipment	0.15	1.79	0.78	3.17E-03	0.06	0.05
Total Maximum Daily Emissions	7.30	39.99	20.30	0.17	8.64	2.60
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.6 LOCALIZED SIGNIFICANCE - CONSTRUCTION ACTIVITY

BACKGROUND ON LOCALIZED SIGNIFICANCE THRESHOLD (LST) DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (Methodology) (34). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4⁴. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (35).

APPLICABILITY OF LSTs FOR THE PROJECT

For this Project, the appropriate Source Receptor Area (SRA) for the LST analysis is the SCAQMD Northwest San Bernardino Valley (SRA 32). LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken:

- CalEEMod is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (36) is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to five acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than five acres per day, then LST impacts are appropriately evaluated through dispersion modeling.
- The LST methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

EMISSIONS CONSIDERED

SCAQMD's Methodology clearly states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs (34)." Therefore, for purposes of the

⁴ The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

construction LST analysis, only emissions included in the CalEEMod “on-site” emissions outputs were considered.

MAXIMUM DAILY DISTURBED-ACREAGE

The acres disturbed is based on the equipment list and days in demolition, site preparation, and grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday. The equipment-specific grading rates are summarized in the CalEEMod user’s guide, *Appendix A: Calculation Details for CalEEMod* (37). It should be noted that although *Appendix A* only identifies equipment-specific grading rates for Crawler Tractors, Graders, Rubber Tired Dozers, and Scrapers, it is assumed that Tractors/Loaders/Backhoes equipment could also be used to grade the Project site and would disturb approximately 0.5 acres per 8-hour day. Based on the equipment list and usage hours summarized in Table 3-3 of this AQIA, the Project would utilize four Tractors/Loaders/Backhoes during site preparation activities and two Tractor/Loaders/Backhoes for grading activities.

Table 3-7 is used to determine the maximum daily disturbed-acreage for use in determining the applicability of the SCAQMD’s LST look-up tables. As shown in the table below, the proposed Project could actively disturb approximately 1.5 acres per day during demolition activities, 3.5 acres per day for site preparation activities, and 4.0 acres per day for the grading activities.

TABLE 3-7 : MAXIMUM DAILY DISTURBED-ACREAGE

Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Demolition	Rubber Tired Dozers	2	0.5	8	1
Total acres disturbed per day during Demolition					1.0
Site Preparation	Rubber Tired Dozers	3	0.5	8	1.5
	Tractors/Loaders/Backhoes	4	0.5	8	2.0
Total acres disturbed per day during Site Preparation					3.5
Grading	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	2	1.0	8	2.0
	Tractors/Loaders/Backhoes	2	0.5	8	1.0
Total acres disturbed per day during Grading					4.0

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as “sensitive receptors”; they are also known to be locations where an individual can remain for 24 hours.

Sensitive receptors in the vicinity of the Project site are illustrated at Exhibit 3-A and include residential uses, and non-noise-sensitive receiver locations include commercial and office uses, as described below. The nearest sensitive receptor is an existing residential home located roughly 10 feet/3 meters west of the Project site boundary.

Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. To assess the stationary source operational and construction air impacts, the following 6 sensitive receptor locations, as shown on Exhibit 3-A, were identified.

- R1: Located approximately 15 feet north of the Project site, R1 represents existing residential outdoor living areas (backyards) on the south side of Arrow Route.
- R2: Location R2 represents the existing commercial/office uses located east of the Project site at roughly 162 feet on the west side of Vineyard Avenue.
- R3: Location R3 represents existing commercial/office uses on the south side of 9th Street at approximately 90 feet south of the Project site.
- R4: Location R4 represents existing residential outdoor living areas (backyards) located roughly 18 feet west of the Project site, north of 9th Street.
- R5: Located approximately 10 feet west of the Project site, R5 represents existing residential outdoor living areas (backyards).
- R6: Location R6 represents the existing residential homes located west of the Project site at roughly 86 feet.

As previously stated, the nearest sensitive receptor is located roughly 10 feet/3 meters west of the Project site boundary. The *Methodology* explicitly states that “*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (34).*” Consistent with the SCAQMD’s Final LST Methodology, a 25-meter receptor distance is utilized in this analysis to determine LSTs for emissions of PM₁₀, and PM_{2.5}.

EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS



LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

Since the total acreage disturbed is less than five acres per day for demolition, site preparation, and grading activities, the SCAQMD's screening look-up tables are utilized in determining impacts. It should be noted that since the look-up tables identifies thresholds at only 1 acre, 2 acres, and 5 acres, linear regression has been utilized to determine localized significance thresholds. Consistent with SCAQMD guidance, the thresholds presented in Table 3-8 were calculated by interpolating the threshold values for the Project's disturbed acreage. As previously noted, a 25-meter receptor distance is utilized to determine the LSTs for emissions of CO, NO₂, PM₁₀, and PM_{2.5}.

TABLE 3-8: MAXIMUM DAILY LOCALIZED EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
Localized Thresholds		
NO _x	118 lbs/day (Demolition)	270 lbs/day
	220 lbs/day (Site Preparation)	
	237 lbs/day (Grading)	
CO	863 lbs/day (Demolition)	2,193 lbs/day
	1,713 lbs/day (Site Preparation)	
	1,873 lbs/day (Grading)	
PM ₁₀	5 lbs/day (Demolition)	4 lbs/day
	11 lbs/day (Site Preparation)	
	13 lbs/day (Grading)	
PM _{2.5}	4 lbs/day (Demolition)	2 lbs/day
	7 lbs/day (Site Preparation)	
	8 lbs/day (Grading)	

CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

Impacts without Mitigation

Table 3-9 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of PM₁₀ and PM_{2.5} during site preparation. Outputs from the model runs for unmitigated construction LSTs are provided in Appendix 3.1.

TABLE 3-9: LOCALIZED SIGNIFICANCE SUMMARY OF CONSTRUCTION (WITHOUT MITIGATION)

On-Site Demolition Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	35.78	22.06	3.53	1.93
SCAQMD Localized Threshold	118	863	5	4
Threshold Exceeded?	NO	NO	NO	NO
On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	45.57	22.06	10.88	6.23
SCAQMD Localized Threshold	220	1,713	11	7
Threshold Exceeded?	NO	NO	NO	NO
On-Site Grading Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	54.52	33.38	6.39	3.66
SCAQMD Localized Threshold	237	1,873	13	8
Threshold Exceeded?	NO	NO	NO	NO

3.7 LOCALIZED SIGNIFICANCE – LONG-TERM OPERATIONAL ACTIVITY

The Project is located on an 11.73-acre parcel. As noted previously, the LST methodology provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project-site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

Table 3-10 shows the calculated emissions for the Project's operational activities compared with the applicable LSTs. The LST analysis includes on-site sources only; however, the CalEEMod™ model outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 3-10 represent all on-site Project-related stationary (area) sources and Project-related mobile sources. It is assumed that the maximum distance a passenger car or truck would make through the project site is approximately 1.0 mile. An on-site travel distance of approximately 1.0 miles/5,280 feet for each passenger car and truck trip has been used as a conservative measure.

Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

Impacts without Mitigation

As shown on Table 3-10 operational emissions will not exceed the LST thresholds for the nearest sensitive receptor. Therefore, the Project will have a less than significant localized impact during operational activity.

TABLE 3-10: LOCALIZED SIGNIFICANCE SUMMARY OF OPERATIONS (WITHOUT MITIGATION)

Operational Activity	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	2.64	1.73	0.40	0.16
SCAQMD Localized Significance Threshold	270	2,193	4	2
Threshold Exceeded?	NO	NO	NO	NO

3.8 CO “HOT SPOT” ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or “hot spots.” Further, detailed modeling of Project-specific carbon monoxide (CO) “hot spots” is not needed to reach this conclusion.

An adverse CO concentration, known as a “hot spot”, would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the 1993 Handbook, the SCAB was designated nonattainment under the California AAQS and National AAQS for CO (21).

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment, as previously noted in Table 2-3. Also, CO concentrations in the Project vicinity have steadily declined, as indicated by historical emissions data presented previously at Table 2-4.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO “hot spot” analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This “hot spot” analysis did not predict any violation of CO standards, as shown on Table 3-11.

TABLE 3-11: CO MODEL RESULTS

Intersection Location	Carbon Monoxide Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire-Veteran	4.6	3.5	4.2
Sunset-Highland	4	4.5	3.9
La Cienega-Century	3.7	3.1	5.8
Long Beach-Imperial	3	3.1	9.3

Source: 2003 AQMP

Notes: ppm: parts per million. Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 9.3 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the “hot spot” analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 8.6 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (38). In contrast, the ambient 8-hr CO concentration within the Project study area is estimated at 1.4 ppm—1.6 ppm (please refer to previous Table 2-3). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (39).

Traffic volumes generating the CO concentrations for the “hot spot” analysis, shown on Table 3-12. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations ($4.6 \text{ ppm} \times 4 = 18.4 \text{ ppm}$) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).⁵ At buildout of the Project, the highest daily traffic volumes generated at the roadways within the vicinity of the Project are expected to generate less than the highest daily traffic volumes generated at the busiest intersection in the CO “hot spot” analysis. As such, the Project would not likely exceed the most stringent 1-hour CO standard.

The proposed Project considered herein would not produce the volume of traffic required to generate a CO “hot spot” either in the context of the 2003 Los Angeles hot spot study or based

⁵ Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

on representative BAAQMD CO threshold considerations. Therefore, CO “hot spots” are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

TABLE 3-12: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Wilshire-Veteran	560/933	721/1,400	4,954/2,069	1,830/3,317	8,062/7,719
Sunset-Highland	1,551/2,238	2,304/1,832	1,417/1,764	1,342/1,540	6,614/5,374
La Cienega-Century	821/1,674	1,384/2,029	2,540/2,243	1,890/2,728	6,634/8,674
Long Beach-Imperial	756/1,150	479/944	1,217/2,020	1,760/1,400	4,212/5,514

Source: 2003 AQMP

Notes: vph-vehicles per hour

3.9 AIR QUALITY MANAGEMENT PLANNING

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what use to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (40). Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories (41). The Project’s consistency with the AQMP will be determined using the 2016 AQMP is discussed below:

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD’s CEQA Air Quality Handbook (1993) (42). These indicators are discussed below:

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

Construction Impacts

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs or regional significance thresholds were exceeded. As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds, respectively. As such, a less than significant impact is expected.

Operational Impacts

The Project would not exceed the applicable regional significance thresholds and LST thresholds for operational activity. Therefore, the Project would not conflict with the AQMP according to this criterion.

On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

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

Overview

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of Rancho Cucamonga General Plan is considered to be consistent with the AQMP.

Construction Impacts

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts

As per the City's General Plan, the Project site designated as General Industrial (GI). The GI land use designation permits a wide range of industrial activities that include manufacturing, assembling fabrication, wholesale supply, heavy commercial, green technology, and office uses (43). As previously stated, the Project proposes the development of 236,534 sf of warehouse use. The Project land uses are generally consistent with the land uses allowed under the City land use designations for the Project site. As such, the Project would be consistent with the growth projections and no changes are proposed to these existing designations. Additionally, the

Project's construction and operational-source air pollutant emissions would not exceed the regional or localized significance thresholds.

On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

The Project would not result in or cause NAAQS or CAAQS violations. The proposed Project is consistent with the land use and growth intensities reflected in the adopted General Plan. Furthermore, the Project would not exceed any applicable regional or local thresholds. As such, the Project is therefore considered to be consistent with the AQMP.

3.10 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors.

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Additionally, the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

FRIANT RANCH

As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (April 6, 2015, Appendix 3.4) (SCAQMD Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). Brief at pages 9-10. The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s))⁶. Brief at page 10. Even where a

⁶ It should also be noted that the actual occurrence of specific health conditions is based on numerous other factors that are infeasible to quantify, such as an individual's genetic predisposition, diet, exercise regiment, stress, and other behavioral characteristics.

health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk--it does not necessarily mean anyone will contract cancer as a result of the Project. *Ibid.* The Brief also cites the author of the CARB methodology, which reported that a PM_{2.5} methodology is not suited for small projects and may yield unreliable results (Brief at page 14). Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects. reached with respect to NO_x or VOC emissions from relatively small projects, due to photochemistry and regional model limitations (Brief at page 12). The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful (Brief at page 15).

On the other hand, for extremely large regional projects (unlike the proposed Project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NO_x and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone (Brief, at page 12).

The proposed Project does not generate anywhere near 6,620 pounds per day of NO_x or 89,190 pounds per day of VOC emissions. The Project would generate a maximum of 54.59 pounds per day of NO_x during construction and 38.81 pounds per day of NO_x during operations (0.82 percent and 0.58 percent of 6,620 pounds per day, respectively). The Project would also generate 62.45 pounds per day of VOC emissions during construction and 7.32 pounds per day of VOC emissions during operations (0.07 percent and 0.01 percent of 89,190 pounds per day, respectively). Therefore, the Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this AQIA does evaluate the proposed Project's localized impact to air quality for emissions of CO, NO_x, PM₁₀, and PM_{2.5} by comparing the proposed Project's on-site emissions to the SCAQMD's applicable LST thresholds. As evaluated in this AQIA, the Project would not result in emissions that exceeded the SCAQMD's LSTs. Therefore, the Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_x, PM₁₀, and PM₁₀.

3.11 ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills

- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the County's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required (44).

3.12 CUMULATIVE IMPACTS

The Project area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM₁₀, PM_{2.5}, and lead.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (45). In this report the AQMD clearly states (Page D-3):

"...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are 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."

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related

construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project will not exceed the applicable SCAQMD regional threshold for construction and operational-source emissions. As such, the Project will not result in a cumulatively significant impact for construction or operational activity.

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4 FINDINGS & CONCLUSIONS

CONSTRUCTION-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project would not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutant. Therefore, a less than significant impact would occur, and no mitigation measures are required.

LOCALIZED IMPACTS

Project construction-source emissions would not exceed the SCAQMD's localized significance thresholds for any criteria pollutant. Therefore, a less than significant impact would occur.

ODORS

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

OPERATIONAL-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project would not exceed the numerical thresholds of significance established by the SCAQMD. Thus, a less than significant impact would occur for Project-related operational-source emissions and no mitigation measures are required.

LOCALIZED IMPACTS

Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the operational LSTs section of this report. The proposed Project would not result in a significant CO "hotspot" as a result of Project related traffic during ongoing operations.

ODORS

Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the Project would include disposal of miscellaneous refuse. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (44). Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste

regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

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6 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed 9th Street and Vineyard Avenue Warehouse Project. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

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TABLE 2-3
National Ambient Air Quality Standards (NAAQS) Attainment Status - South Coast Air Basin

Criteria Pollutant	Averaging Time	Designation ^a	Attainment Date ^b
Ozone (O₃)	(1979) 1-Hour (0.12 ppm) ^c	Nonattainment (“extreme”)	2/26/2023 (revised deadline)
	(2015) 8-Hour (0.070 ppm) ^d	Pending – Expect Nonattainment (“extreme”)	Pending (beyond 2032)
	(2008) 8-Hour (0.075 ppm) ^d	Nonattainment (“extreme”)	7/20/2032
	(1997) 8-Hour (0.08 ppm) ^d	Nonattainment (“extreme”)	6/15/2024
PM_{2.5}^e	(2006) 24-Hour (35 µg/m ³)	Nonattainment (“serious”)	12/31/2019
	(2012) Annual (12.0 µg/m ³)	Nonattainment (“moderate”)	12/31/2021
	(1997) Annual (15.0 µg/m ³)	Attainment (final determination pending)	4/5/2015 (attained 2013)
PM₁₀^f	(1987) 24-hour (150 µg/m ³)	Attainment (Maintenance)	7/26/2013 (attained)
Lead (Pb)^g	(2008) 3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) (Attainment determination to be requested)	12/31/2015
CO	(1971) 1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	(1971) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
NO₂^h	(2010) 1-Hour (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	(1971) Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
SO₂ⁱ	(2010) 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/Attainment)	N/A (attained)
	(1971) 24-Hour (0.14 ppm) (1971) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)

- a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
- b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for an attainment demonstration
- c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective 6/15/05 ; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard; original attainment date was 11/15/2010; the revised attainment date is 2/6/23
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone NAAQS implementation rule, effective 4/6/15; there are continuing obligations under the revoked 1997 and revised 2008 ozone NAAQS until they are attained
- e) The attainment deadline for the 2006 24-hour PM_{2.5} NAAQS was 12/31/15 for the former “moderate” classification; U.S.EPA approved reclassification to “serious,” effective 2/12/16 with an attainment deadline of 12/31/2019; the 2012 (proposal year) annual PM_{2.5} NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m³; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 U.S. EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m³) and 24-hour PM_{2.5} (65 µg/m³) NAAQS, effective August 24, 2016
- f) The annual PM₁₀ NAAQS was revoked, effective 12/18/06; the 24-hour PM₁₀ NAAQS deadline was 12/31/2006; the Basin’s Attainment Re-designation Request and PM₁₀ Maintenance Plan was approved by U.S. EPA on 6/26/13, effective 7/26/13
- g) Partial Nonattainment designation – Los Angeles County portion of the Basin only for near-source monitors; expect to remain in attainment based on current monitoring data; attainment re-designation request pending
- h) New 1-hour NO₂ NAAQS became effective 8/2/10, with attainment designations 1/20/12; annual NO₂ NAAQS retained
- i) The 1971 annual and 24-hour SO₂ NAAQS were revoked, effective 8/23/10; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour NAAQS; final area designations expected by 12/31/20 due to new source-specific monitoring requirements; Basin expected to be in attainment due to ongoing clean data

TABLE 2-4
National Ambient Air Quality Standards (NAAQS) Attainment Status
Coachella Valley Portion of the Salton Sea Air Basin

Criteria Pollutant	Averaging Time	Designation ^a	Attainment Date ^b
Ozone (O₃)	(1979) 1-Hour (0.12 ppm) ^c	Attainment	11/15/2007 (attained 12/31/2013)
	(2015) 8-Hour (0.070 ppm) ^d	Pending – Expect Nonattainment (Severe)	Pending
	(2008) 8-Hour (0.075 ppm) ^d	Nonattainment (Severe-15)	7/20/2027
	(1997) 8-Hour (0.08 ppm) ^d	Nonattainment (Severe-15)	6/15/2019
PM_{2.5}^e	(2006) 24-Hour (35 µg/m ³)	Unclassifiable/Attainment	N/A (attained)
	(2012) Annual (12.0 µg/m ³)	Unclassifiable/Attainment	N/A (attained)
	(1997) Annual (15.0 µg/m ³)	Unclassifiable/Attainment	N/A (attained)
PM₁₀^f	(1987) 24-hour (150 µg/m ³)	Nonattainment (“serious”)	12/31/2006
Lead (Pb)	(2008) 3-Months Rolling (0.15 µg/m ³)	Unclassifiable/Attainment	Unclassifiable/ Attainment
CO	(1971) 1-Hour (35 ppm)	Unclassifiable/Attainment	N/A (attained)
	(1971) 8-Hour (9 ppm)	Unclassifiable/Attainment	N/A (attained)
NO₂^g	(2010) 1-Hour (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	(1971) Annual (0.053 ppm)	Unclassifiable/Attainment	N/A (attained)
SO₂^h	(2010) 1-Hour (75 ppb)	Designations Pending	N/A
	(1971) 24-Hour (0.14 ppm)	Unclassifiable/Attainment	Unclassifiable/ Attainment
	(1971) Annual (0.03 ppm)		

- a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
- b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for an attainment demonstration
- c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective 6/15/05; the Southeast Desert Modified Air Quality Management Area, including the Coachella Valley, had not timely attained this standard by the 11/15/07 “severe-17” deadline, based on 2005-2007 data; on 8/25/14, U.S. EPA proposed a clean data finding based on 2011–2013 data and a determination of attainment for the former 1-hour ozone NAAQS for the Southeast Desert nonattainment area; this rule was finalized by U.S. EPA on 4/15/15, effective 5/15/15, that included preliminary 2014 data
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone NAAQS implementation rule, effective 4/6/15; there are continuing obligations under the 1997 and 2008 ozone NAAQS until they are attained
- e) The annual PM_{2.5} standard was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m³
- f) The annual PM₁₀ standard was revoked, effective 12/18/06; the 24-hour PM₁₀ NAAQS attainment deadline was 12/31/2006; the Coachella Valley Attainment Re-designation Request and PM₁₀ Maintenance Plan was postponed by U.S. EPA pending additional monitoring and analysis in the southeastern Coachella Valley
- g) New 1-hour NO₂ NAAQS became effective 8/2/10; attainment designations 1/20/12; annual NO₂ NAAQS retained
- h) The 1971 Annual and 24-hour SO₂ NAAQS were revoked, effective 8/23/10; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour standard; final area designations expected by 12/31/2020 with SSAB expected to be designated Unclassifiable/Attainment

The current status of CAAQS attainment for the pollutants with State standards is presented in Table 2-5 for the Basin and the Riverside County portion of the SSAB (Coachella Valley).

TABLE 2-5

California Ambient Air Quality Standards (CAAQS) Attainment Status
South Coast Air Basin and Coachella Valley portion of Salton Sea Air Basin

Pollutant	Averaging Time and Level ^b	Designation ^a	
		South Coast Air Basin	Coachella Valley
Ozone (O ₃)	1-Hour (0.09 ppm) ^c	Nonattainment	Nonattainment
	8-Hour (0.070 ppm) ^d	Nonattainment	Nonattainment
PM _{2.5}	Annual (12.0 µg/m ³)	Nonattainment	Attainment
PM ₁₀	24-Hour (50 µg/m ³)	Nonattainment	Nonattainment
	Annual (20 µg/m ³)	Nonattainment	Nonattainment
Lead (Pb)	30-Day Average (1.5 µg/m ³)	Attainment	Attainment
CO	1-Hour (20 ppm)	Attainment	Attainment
	8-Hour (9.0 ppm)	Attainment	Attainment
NO ₂	1-Hour (0.18 ppm)	Attainment	Attainment
	Annual (0.030 ppm)	Attainment	Attainment
SO ₂	1-Hour (0.25 ppm)	Attainment	Attainment
	24-Hour (0.04 ppm)	Attainment	Attainment
Sulfates	24-Hour (25 µg/m ³)	Attainment	Attainment
H ₂ S ^c	1-Hour (0.03 ppm)	Unclassified	Unclassified ^{c)}

- a) CA State designations shown were updated by CARB in 2016, based on the 2013–2015 3-year period; stated designations are based on a 3-year data period after consideration of outliers and exceptional events; Source: <http://www.arb.ca.gov/desig/statedesig.htm#current>
- b) CA State standards, or CAAQS, for ozone, CO, SO₂, NO₂, PM₁₀ and PM_{2.5} are values not to be exceeded; lead, sulfates, and H₂S standards are values not to be equaled or exceeded; CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations
- c) SCAQMD began monitoring H₂S in the southeastern Coachella Valley in November 2013 due to odor events related to the Salton Sea; three full years of data are not yet available for a State designation, but nonattainment is anticipated for the H₂S CAAQS in at least part of the Coachella Valley

The 1979 federal 1-hour ozone standard (0.12 ppm) was revoked by the U.S. EPA and replaced by the 8-hour average ozone standard (0.08 ppm), effective June 15, 2005. However, the Basin and the former Southeast Desert Modified Air Quality Management Area (which included the Coachella Valley) had not attained the 1-hour federal ozone NAAQS by the attainment dates in 2010 and 2007, respectively, and, therefore, had continuing obligations under the former standard. On August 25, 2014, U.S. EPA

APPENDIX 3.1:

CALEEMOD CONSTRUCTION EMISSIONS MODEL OUTPUTS

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9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated)
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Paving and Architectural Coating activities to be conducted concurrent with Building Construction.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment -

Off-road Equipment - Hours are based on an 8-hour workday.

Grading - Based on the Equipment List the total acres graded per day is 3.5 acres for site preparation activities and 4.0 acres for grading activities.

Demolition -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

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
tblConstructionPhase	PhaseEndDate	2/10/2021	12/23/2020
tblConstructionPhase	PhaseEndDate	1/13/2021	12/23/2020
tblConstructionPhase	PhaseStartDate	1/14/2021	11/26/2020
tblConstructionPhase	PhaseStartDate	12/17/2020	11/26/2020
tblEnergyUse	LightingElect	0.35	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblGrading	AcresOfGrading	75.00	120.00
tblGrading	AcresOfGrading	0.00	35.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00
tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	222.34	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	54,697,562.50	0.00

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

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					
2019	4.8456	54.5948	34.1875	0.0738	21.9792	2.3919	24.3711	10.3848	2.2006	12.5854	0.0000	7,407.176 2	7,407.176 2	1.9495	0.0000	7,430.415 9
2020	62.4479	46.6746	47.4507	0.1059	3.5891	2.1629	5.7520	0.9641	2.0260	2.9901	0.0000	10,479.50 13	10,479.50 13	1.6643	0.0000	10,521.10 78
Maximum	62.4479	54.5948	47.4507	0.1059	21.9792	2.3919	24.3711	10.3848	2.2006	12.5854	0.0000	10,479.50 13	10,479.50 13	1.9495	0.0000	10,521.10 78

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					
2019	4.8456	54.5948	34.1875	0.0738	8.6946	2.3919	11.0865	4.0826	2.2006	6.2832	0.0000	7,407.176 2	7,407.176 2	1.9495	0.0000	7,430.415 9
2020	62.4479	46.6746	47.4507	0.1059	3.5891	2.1629	5.7520	0.9641	2.0260	2.9901	0.0000	10,479.50 13	10,479.50 13	1.6643	0.0000	10,521.10 78
Maximum	62.4479	54.5948	47.4507	0.1059	8.6946	2.3919	11.0865	4.0826	2.2006	6.2832	0.0000	10,479.50 13	10,479.50 13	1.9495	0.0000	10,521.10 78

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.96	0.00	44.10	55.53	0.00	40.46	0.00	0.00	0.00	0.00	0.00	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
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
Total	5.4062	4.0000e-004	0.0429	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004	0.0000	0.0975

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
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
Total	5.4062	4.0000e-004	0.0429	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004	0.0000	0.0975

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/28/2019	5	20	
2	Site Preparation	Site Preparation	8/29/2019	9/11/2019	5	10	
3	Grading	Grading	9/12/2019	10/23/2019	5	30	
4	Building Construction	Building Construction	10/24/2019	12/16/2020	5	300	
5	Paving	Paving	11/26/2020	12/23/2020	5	20	
6	Architectural Coating	Architectural Coating	11/26/2020	12/23/2020	5	20	

Acres of Grading (Site Preparation Phase): 35**Acres of Grading (Grading Phase): 120****Acres of Paving: 6.3****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 354,801; Non-Residential Outdoor: 118,267; Striped Parking Area: 16,459 (Architectural Coating – sqft)****OffRoad Equipment**

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

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	412.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	84.00	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
Architectural Coating	1	43.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4606	0.0000	4.4606	0.6754	0.0000	0.6754			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	4.4606	1.7949	6.2555	0.6754	1.6697	2.3451		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1743	6.0779	1.2419	0.0159	0.3600	0.0227	0.3827	0.0987	0.0217	0.1203		1,712.786 9	1,712.786 9	0.1244		1,715.896 7
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
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	0.2542	6.1339	1.8500	0.0175	0.5276	0.0240	0.5516	0.1431	0.0229	0.1660		1,878.485 3	1,878.485 3	0.1296		1,881.724 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/day										lb/day					
Fugitive Dust					1.7396	0.0000	1.7396	0.2634	0.0000	0.2634			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	1.7396	1.7949	3.5345	0.2634	1.6697	1.9331	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1743	6.0779	1.2419	0.0159	0.3600	0.0227	0.3827	0.0987	0.0217	0.1203		1,712.786 9	1,712.786 9	0.1244		1,715.896 7
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
Worker	0.0800	0.0560	0.6081	1.6600e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		165.6984	165.6984	5.1800e-003		165.8278
Total	0.2542	6.1339	1.8500	0.0175	0.5276	0.0240	0.5516	0.1431	0.0229	0.1660		1,878.485 3	1,878.485 3	0.1296		1,881.724 5

3.3 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	21.7780	2.3904	24.1684	10.3315	2.1991	12.5306		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4934	0.0000	8.4934	4.0293	0.0000	4.0293			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	8.4934	2.3904	10.8838	4.0293	2.1991	6.2284	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933
Total	0.0960	0.0672	0.7297	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		198.8380	198.8380	6.2100e-003		198.9933

3.4 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.2641	0.0000	10.2641	3.7683	0.0000	3.7683			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	10.2641	2.3827	12.6467	3.7683	2.1920	5.9603		6,140.0195	6,140.0195	1.9426		6,188.5854

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.4 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0030	0.0000	4.0030	1.4696	0.0000	1.4696			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	4.0030	2.3827	6.3856	1.4696	2.1920	3.6617	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.4 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037
Total	0.1067	0.0747	0.8108	2.2200e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		220.9312	220.9312	6.9000e-003		221.1037

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	9.6184	2.5877	0.0212	0.5376	0.0647	0.6023	0.1548	0.0619	0.2166		2,253.8567	2,253.8567	0.1650		2,257.9810
Worker	1.1465	0.8026	8.7158	0.0239	2.4032	0.0187	2.4219	0.6373	0.0172	0.6546		2,375.0099	2,375.0099	0.0742		2,376.8649
Total	1.4848	10.4209	11.3035	0.0450	2.9408	0.0834	3.0242	0.7921	0.0791	0.8712		4,628.8665	4,628.8665	0.2392		4,634.8459

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
Total	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3383	9.6184	2.5877	0.0212	0.5376	0.0647	0.6023	0.1548	0.0619	0.2166		2,253.8567	2,253.8567	0.1650		2,257.9810
Worker	1.1465	0.8026	8.7158	0.0239	2.4032	0.0187	2.4219	0.6373	0.0172	0.6546		2,375.0099	2,375.0099	0.0742		2,376.8649
Total	1.4848	10.4209	11.3035	0.0450	2.9408	0.0834	3.0242	0.7921	0.0791	0.8712		4,628.8665	4,628.8665	0.2392		4,634.8459

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.6999	2,735.6999	0.6819		2,752.7481
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.6999	2,735.6999	0.6819		2,752.7481

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2890	8.8054	2.3401	0.0210	0.5376	0.0443	0.5819	0.1548	0.0424	0.1972		2,238.707 6	2,238.707 6	0.1555		2,242.593 9
Worker	1.0609	0.7160	7.9139	0.0231	2.4032	0.0182	2.4214	0.6373	0.0168	0.6541		2,301.284 7	2,301.284 7	0.0660		2,302.934 6
Total	1.3499	9.5214	10.2540	0.0441	2.9408	0.0626	3.0034	0.7921	0.0592	0.8513		4,539.992 2	4,539.992 2	0.2215		4,545.528 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/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2890	8.8054	2.3401	0.0210	0.5376	0.0443	0.5819	0.1548	0.0424	0.1972		2,238.707 6	2,238.707 6	0.1555		2,242.593 9
Worker	1.0609	0.7160	7.9139	0.0231	2.4032	0.0182	2.4214	0.6373	0.0168	0.6541		2,301.284 7	2,301.284 7	0.0660		2,302.934 6
Total	1.3499	9.5214	10.2540	0.0441	2.9408	0.0626	3.0034	0.7921	0.0592	0.8513		4,539.992 2	4,539.992 2	0.2215		4,545.528 5

3.6 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5098	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.6 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5098	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.6 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699
Total	0.0740	0.0500	0.5521	1.6100e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		160.5547	160.5547	4.6000e-003		160.6699

3.7 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.7239					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904
Total	57.0468	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2122	0.1432	1.5828	4.6200e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		460.2569	460.2569	0.0132		460.5869
Total	0.2122	0.1432	1.5828	4.6200e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		460.2569	460.2569	0.0132		460.5869

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.7239					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
Total	57.0468	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

3.7 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2122	0.1432	1.5828	4.6200e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		460.2569	460.2569	0.0132		460.5869
Total	0.2122	0.1432	1.5828	4.6200e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		460.2569	460.2569	0.0132		460.5869

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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Winter

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated)
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Paving and Architectural Coating activities to be conducted concurrent with Building Construction.

Off-road Equipment - Hours are based on an 8-hour workday.

Off-road Equipment -

Off-road Equipment - Hours are based on an 8-hour workday.

Grading - Based on the Equipment List the total acres graded per day is 3.5 acres for site preparation activities and 4.0 acres for grading activities.

Demolition -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation - Rule 403

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

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
tblConstructionPhase	PhaseEndDate	2/10/2021	12/23/2020
tblConstructionPhase	PhaseEndDate	1/13/2021	12/23/2020
tblConstructionPhase	PhaseStartDate	1/14/2021	11/26/2020
tblConstructionPhase	PhaseStartDate	12/17/2020	11/26/2020
tblEnergyUse	LightingElect	0.35	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblGrading	AcresOfGrading	75.00	120.00
tblGrading	AcresOfGrading	0.00	35.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00
tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	222.34	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	54,697,562.50	0.00

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

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					
2019	4.8369	54.5883	34.2754	0.0761	21.9792	2.3919	24.3711	10.3848	2.2006	12.5854	0.0000	7,637.681 6	7,637.681 6	1.9500	0.0000	7,660.765 3
2020	62.3228	46.6049	48.3215	0.1085	3.5891	2.1623	5.7514	0.9641	2.0254	2.9895	0.0000	10,748.32 41	10,748.32 41	1.6596	0.0000	10,789.81 34
Maximum	62.3228	54.5883	48.3215	0.1085	21.9792	2.3919	24.3711	10.3848	2.2006	12.5854	0.0000	10,748.32 41	10,748.32 41	1.9500	0.0000	10,789.81 34

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					
2019	4.8369	54.5883	34.2754	0.0761	8.6946	2.3919	11.0865	4.0826	2.2006	6.2832	0.0000	7,637.681 6	7,637.681 6	1.9500	0.0000	7,660.765 3
2020	62.3228	46.6049	48.3215	0.1085	3.5891	2.1623	5.7514	0.9641	2.0254	2.9895	0.0000	10,748.32 41	10,748.32 41	1.6596	0.0000	10,789.81 34
Maximum	62.3228	54.5883	48.3215	0.1085	8.6946	2.3919	11.0865	4.0826	2.2006	6.2832	0.0000	10,748.32 41	10,748.32 41	1.9500	0.0000	10,789.81 34

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.96	0.00	44.10	55.53	0.00	40.46	0.00	0.00	0.00	0.00	0.00	0.00

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
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
Total	5.4062	4.0000e-004	0.0429	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004	0.0000	0.0975

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
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
Total	5.4062	4.0000e-004	0.0429	0.0000	0.0000	1.5000e-004	1.5000e-004	0.0000	1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004	0.0000	0.0975

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/28/2019	5	20	
2	Site Preparation	Site Preparation	8/29/2019	9/11/2019	5	10	
3	Grading	Grading	9/12/2019	10/23/2019	5	30	
4	Building Construction	Building Construction	10/24/2019	12/16/2020	5	300	
5	Paving	Paving	11/26/2020	12/23/2020	5	20	
6	Architectural Coating	Architectural Coating	11/26/2020	12/23/2020	5	20	

Acres of Grading (Site Preparation Phase): 35**Acres of Grading (Grading Phase): 120****Acres of Paving: 6.3****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 354,801; Non-Residential Outdoor: 118,267; Striped Parking Area: 16,459 (Architectural Coating – sqft)****OffRoad Equipment**

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

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	412.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	84.00	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
Architectural Coating	1	43.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.4606	0.0000	4.4606	0.6754	0.0000	0.6754			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	4.4606	1.7949	6.2555	0.6754	1.6697	2.3451		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1693	5.9972	1.1479	0.0162	0.3600	0.0223	0.3822	0.0987	0.0213	0.1199		1,744.443 4	1,744.443 4	0.1190		1,747.418 4
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
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.2427	6.0483	1.8219	0.0179	0.5276	0.0236	0.5512	0.1431	0.0225	0.1656		1,921.591 8	1,921.591 8	0.1245		1,924.705 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/day										lb/day					
Fugitive Dust					1.7396	0.0000	1.7396	0.2634	0.0000	0.2634			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1
Total	3.5134	35.7830	22.0600	0.0388	1.7396	1.7949	3.5345	0.2634	1.6697	1.9331	0.0000	3,816.899 4	3,816.899 4	1.0618		3,843.445 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1693	5.9972	1.1479	0.0162	0.3600	0.0223	0.3822	0.0987	0.0213	0.1199		1,744.443 4	1,744.443 4	0.1190		1,747.418 4
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
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457		177.1484	177.1484	5.5400e-003		177.2869
Total	0.2427	6.0483	1.8219	0.0179	0.5276	0.0236	0.5512	0.1431	0.0225	0.1656		1,921.591 8	1,921.591 8	0.1245		1,924.705 3

3.3 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.7780	0.0000	21.7780	10.3315	0.0000	10.3315			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	21.7780	2.3904	24.1684	10.3315	2.1991	12.5306		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4934	0.0000	8.4934	4.0293	0.0000	4.0293			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	8.4934	2.3904	10.8838	4.0293	2.1991	6.2284	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003		212.7442

3.4 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.2641	0.0000	10.2641	3.7683	0.0000	3.7683			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	10.2641	2.3827	12.6467	3.7683	2.1920	5.9603		6,140.0195	6,140.0195	1.9426		6,188.5854

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.4 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0030	0.0000	4.0030	1.4696	0.0000	1.4696			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	4.0030	2.3827	6.3856	1.4696	2.1920	3.6617	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.4 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825
Total	0.0980	0.0682	0.8987	2.3700e-003	0.2236	1.7400e-003	0.2253	0.0593	1.6000e-003	0.0609		236.1978	236.1978	7.3900e-003		236.3825

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
Total	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3238	9.6116	2.3235	0.0218	0.5376	0.0637	0.6013	0.1548	0.0609	0.2157		2,320.245 5	2,320.245 5	0.1535		2,324.083 6
Worker	1.0530	0.7327	9.6607	0.0255	2.4032	0.0187	2.4219	0.6373	0.0172	0.6546		2,539.126 4	2,539.126 4	0.0794		2,541.111 7
Total	1.3768	10.3443	11.9843	0.0473	2.9408	0.0824	3.0232	0.7921	0.0781	0.8703		4,859.371 9	4,859.371 9	0.2329		4,865.195 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/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.309 7	2,778.309 7	0.6904		2,795.570 0
Total	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.309 7	2,778.309 7	0.6904		2,795.570 0

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3238	9.6116	2.3235	0.0218	0.5376	0.0637	0.6013	0.1548	0.0609	0.2157		2,320.245 5	2,320.245 5	0.1535		2,324.083 6
Worker	1.0530	0.7327	9.6607	0.0255	2.4032	0.0187	2.4219	0.6373	0.0172	0.6546		2,539.126 4	2,539.126 4	0.0794		2,541.111 7
Total	1.3768	10.3443	11.9843	0.0473	2.9408	0.0824	3.0232	0.7921	0.0781	0.8703		4,859.371 9	4,859.371 9	0.2329		4,865.195 3

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.699 9	2,735.699 9	0.6819		2,752.748 1
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.699 9	2,735.699 9	0.6819		2,752.748 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2759	8.8146	2.0989	0.0216	0.5376	0.0437	0.5813	0.1548	0.0418	0.1966		2,305.367 0	2,305.367 0	0.1447		2,308.985 6
Worker	0.9728	0.6539	8.7896	0.0247	2.4032	0.0182	2.4214	0.6373	0.0168	0.6541		2,460.497 5	2,460.497 5	0.0707		2,462.266 1
Total	1.2486	9.4684	10.8885	0.0463	2.9408	0.0619	3.0027	0.7921	0.0586	0.8507		4,765.864 6	4,765.864 6	0.2155		4,771.251 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/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2759	8.8146	2.0989	0.0216	0.5376	0.0437	0.5813	0.1548	0.0418	0.1966		2,305.367 0	2,305.367 0	0.1447		2,308.985 6
Worker	0.9728	0.6539	8.7896	0.0247	2.4032	0.0182	2.4214	0.6373	0.0168	0.6541		2,460.497 5	2,460.497 5	0.0707		2,462.266 1
Total	1.2486	9.4684	10.8885	0.0463	2.9408	0.0619	3.0027	0.7921	0.0586	0.8507		4,765.864 6	4,765.864 6	0.2155		4,771.251 6

3.6 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5098	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.6 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860
Total	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.1533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5098	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.6 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860
Total	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456		171.6626	171.6626	4.9400e-003		171.7860

3.7 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.7239					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904
Total	57.0468	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1946	0.1308	1.7579	4.9400e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		492.0995	492.0995	0.0142		492.4532
Total	0.1946	0.1308	1.7579	4.9400e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		492.0995	492.0995	0.0142		492.4532

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	56.7239					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
Total	57.0468	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

3.7 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1946	0.1308	1.7579	4.9400e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		492.0995	492.0995	0.0142		492.4532
Total	0.1946	0.1308	1.7579	4.9400e-003	0.4806	3.6500e-003	0.4843	0.1275	3.3600e-003	0.1308		492.0995	492.0995	0.0142		492.4532

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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	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

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	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

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Construction - Unmitigated) - South Coast AQMD Air District, Summer

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX 3.2:

CALEEMOD OPERATIONAL (PASSENGER CARS) EMISSIONS MODEL OUTPUTS

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9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars)
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates based on information provided in the Trip Generation.

Operational Off-Road Equipment - Based on the latest available information from SCAQMD.

Fleet Mix - Operations Run Only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	8/28/2019	8/1/2019
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8620e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.38

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	0.4209	0.7533	9.0757	0.0341	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,400.2301	3,400.2301	0.0724		3,402.0392
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	5.9883	2.6694	10.0074	0.0380	4.1165	0.0953	4.2118	1.0912	0.0885	1.1798		3,862.1216	3,862.1216	0.1749	2.8400e-003	3,867.3390

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	0.4209	0.7533	9.0757	0.0341	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,400.2301	3,400.2301	0.0724		3,402.0392
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	5.9883	2.6694	10.0074	0.0380	4.1165	0.0953	4.2118	1.0912	0.0885	1.1798		3,862.1216	3,862.1216	0.1749	2.8400e-003	3,867.3390

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/1/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

Acres of Paving: 6.3**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 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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

4.0 Operational Detail - Mobile

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4209	0.7533	9.0757	0.0341	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,400.230 1	3,400.230 1	0.0724		3,402.039 2
Unmitigated	0.4209	0.7533	9.0757	0.0341	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,400.230 1	3,400.230 1	0.0724		3,402.039 2

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	326.42	326.42	326.42	1,972,342	1,972,342
Total	326.42	326.42	326.42	1,972,342	1,972,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	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	100.00	0.00	0.00	100	0	0

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
NaturalGas Unmitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1315.52	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1.31552	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

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
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

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					
Tractors/Loaders/Backhoes	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Winter

Boilers

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

Equipment Type	Number
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11.0 Vegetation

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars)
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates based on information provided in the Trip Generation.

Operational Off-Road Equipment - Based on the latest available information from SCAQMD.

Fleet Mix - Operations Run Only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	8/28/2019	8/1/2019
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8620e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.38
tblVehicleTrips	SU_TR	1.68	1.38
tblVehicleTrips	WD_TR	1.68	1.38

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	0.4584	0.6917	10.2212	0.0365	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,642.2385	3,642.2385	0.0780		3,644.1896
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.0258	2.6078	11.1528	0.0405	4.1165	0.0953	4.2118	1.0912	0.0885	1.1798		4,104.1300	4,104.1300	0.1806	2.8400e-003	4,109.4894

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	0.4584	0.6917	10.2212	0.0365	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,642.2385	3,642.2385	0.0780		3,644.1896
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.0258	2.6078	11.1528	0.0405	4.1165	0.0953	4.2118	1.0912	0.0885	1.1798		4,104.1300	4,104.1300	0.1806	2.8400e-003	4,109.4894

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/1/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

Acres of Paving: 6.3**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 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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

4.0 Operational Detail - Mobile

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4584	0.6917	10.2212	0.0365	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,642.2385	3,642.2385	0.0780		3,644.1896
Unmitigated	0.4584	0.6917	10.2212	0.0365	4.1165	0.0267	4.1433	1.0912	0.0247	1.1159		3,642.2385	3,642.2385	0.0780		3,644.1896

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	326.42	326.42	326.42	1,972,342	1,972,342
Total	326.42	326.42	326.42	1,972,342	1,972,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	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	100.00	0.00	0.00	100	0	0

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
NaturalGas Unmitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1315.52	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1.31552	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

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
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

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					
Tractors/Loaders/Backhoes	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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9th St. & Vineyard Av. Warehouse (Operations - Passenger Cars) - South Coast AQMD Air District, Summer

Boilers

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX 3.3:

CALEEMOD OPERATIONAL (TRUCKS) EMISSIONS MODEL OUTPUTS

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9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

9th St. & Vineyard Av. Warehouse (Operations - Trucks)

South Coast AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates based on information provided in the Trip Generation.

Operational Off-Road Equipment - Based on the latest available information from SCAQMD.

Fleet Mix - Operations Run Only.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.59
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8620e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00
tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	55.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.36
tblVehicleTrips	SU_TR	1.68	0.36
tblVehicleTrips	WD_TR	1.68	0.36

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	1.3091	37.3177	10.2940	0.1343	4.1812	0.2479	4.4292	1.1781	0.2371	1.4153		14,348.5410	14,348.5410	0.6747		14,365.4077
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.8765	39.2338	11.2257	0.1382	4.1812	0.3165	4.4977	1.1781	0.3010	1.4791		14,810.4324	14,810.4324	0.7772	2.8400e-003	14,830.7075

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	1.3091	37.3177	10.2940	0.1343	4.1812	0.2479	4.4292	1.1781	0.2371	1.4153		14,348.54 10	14,348.54 10	0.6747		14,365.40 77
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.8765	39.2338	11.2257	0.1382	4.1812	0.3165	4.4977	1.1781	0.3010	1.4791		14,810.43 24	14,810.43 24	0.7772	2.8400e-003	14,830.70 75

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/28/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

Acres of Paving: 6.3**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 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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

3.2 Demolition - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

4.0 Operational Detail - Mobile

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3091	37.3177	10.2940	0.1343	4.1812	0.2479	4.4292	1.1781	0.2371	1.4153		14,348.54 10	14,348.54 10	0.6747		14,365.40 77
Unmitigated	1.3091	37.3177	10.2940	0.1343	4.1812	0.2479	4.4292	1.1781	0.2371	1.4153		14,348.54 10	14,348.54 10	0.6747		14,365.40 77

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	85.15	85.15	85.15	1,704,748	1,704,748
Total	85.15	85.15	85.15	1,704,748	1,704,748

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	55.00	8.40	6.90	100.00	0.00	0.00	100	0	0

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.174000	0.000000	0.233000	0.593000	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/day										lb/day					
NaturalGas Mitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
NaturalGas Unmitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1315.52	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1.31552	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

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
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

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					
Tractors/Loaders/Backhoes	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Winter

Boilers

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

Equipment Type	Number
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11.0 Vegetation

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

9th St. & Vineyard Av. Warehouse (Operations - Trucks)

South Coast AQMD Air District, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	236.53	1000sqft	5.43	236,534.00	0
Other Non-Asphalt Surfaces	5.13	Acre	5.13	223,228.00	0
Parking Lot	176.00	Space	1.17	51,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

Project Characteristics -

Land Use - As per the Site Plan, the Total Project Area is 11.73 acres.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Trips and VMT - Operations Run Only.

Vehicle Trips - Trip Rates based on information provided in the Trip Generation.

Operational Off-Road Equipment - Based on the latest available information from SCAQMD.

Fleet Mix - Operations Run Only.

Table Name	Column Name	Default Value	New Value
tblFleetMix	HHD	0.03	0.59
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8620e-003	0.00
tblFleetMix	MCY	4.7770e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	9.5600e-004	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	2.0370e-003	0.00
tblFleetMix	SBUS	7.0500e-004	0.00
tblFleetMix	UBUS	1.9440e-003	0.00
tblLandUse	LandUseSquareFeet	223,462.80	223,228.00
tblLandUse	LandUseSquareFeet	70,400.00	51,085.00
tblLandUse	LotAcreage	1.58	1.17
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	55.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.36
tblVehicleTrips	SU_TR	1.68	0.36
tblVehicleTrips	WD_TR	1.68	0.36

2.0 Emissions Summary

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	1.2980	36.2011	10.1249	0.1350	4.1812	0.2472	4.4284	1.1781	0.2365	1.4146		14,427.3343	14,427.3343	0.6632		14,443.9148
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.8653	38.1172	11.0566	0.1390	4.1812	0.3158	4.4970	1.1781	0.3003	1.4784		14,889.2258	14,889.2258	0.7657	2.8400e-003	14,909.2146

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

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	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Energy	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Mobile	1.2980	36.2011	10.1249	0.1350	4.1812	0.2472	4.4284	1.1781	0.2365	1.4146		14,427.3343	14,427.3343	0.6632		14,443.9148
Offroad	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	6.8653	38.1172	11.0566	0.1390	4.1812	0.3158	4.4970	1.1781	0.3003	1.4784		14,889.2258	14,889.2258	0.7657	2.8400e-003	14,909.2146

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	8/28/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

Acres of Paving: 6.3**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 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	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

3.2 Demolition - 2019**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	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/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
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
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
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

4.0 Operational Detail - Mobile

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2980	36.2011	10.1249	0.1350	4.1812	0.2472	4.4284	1.1781	0.2365	1.4146		14,427.33 43	14,427.33 43	0.6632		14,443.91 48
Unmitigated	1.2980	36.2011	10.1249	0.1350	4.1812	0.2472	4.4284	1.1781	0.2365	1.4146		14,427.33 43	14,427.33 43	0.6632		14,443.91 48

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	85.15	85.15	85.15	1,704,748	1,704,748
Total	85.15	85.15	85.15	1,704,748	1,704,748

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	55.00	8.40	6.90	100.00	0.00	0.00	100	0	0

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Parking Lot	0.547828	0.043645	0.199892	0.122290	0.016774	0.005862	0.020637	0.032653	0.002037	0.001944	0.004777	0.000705	0.000956
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.174000	0.000000	0.233000	0.593000	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/day										lb/day					
NaturalGas Mitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
NaturalGas Unmitigated	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1315.52	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	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
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	1.31552	0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865
Total		0.0142	0.1290	0.1083	7.7000e-004		9.8000e-003	9.8000e-003		9.8000e-003	9.8000e-003		154.7668	154.7668	2.9700e-003	2.8400e-003	155.6865

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Unmitigated	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6216					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.7805					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.0400e-003	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975
Total	5.4062	4.0000e-004	0.0429	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0914	0.0914	2.5000e-004		0.0975

7.0 Water Detail

9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

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
Tractors/Loaders/Backhoes	1	4.00	365	200	0.37	CNG

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					
Tractors/Loaders/Backhoes	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158
Total	0.1470	1.7867	0.7804	3.1700e-003		0.0586	0.0586		0.0539	0.0539		307.0332	307.0332	0.0993		309.5158

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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9th St. & Vineyard Av. Warehouse (Operations - Trucks) - South Coast AQMD Air District, Summer

Boilers

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX 3.5:

SCAQMD BRIEF

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S219783

IN THE SUPREME COURT OF CALIFORNIA

SIERRA CLUB, REVIVE THE SAN JOAQUIN, and
LEAGUE OF WOMEN VOTERS OF FRESNO,

Plaintiffs and Appellants,

v.

COUNTY OF FRESNO,

Defendant and Respondent,

and,

FRIANT RANCH, L.P.,

Real Party in Interest and Respondent.

SUPREME COURT
FILED

APR 13 2015

Frank A. McGuire Clerk
Deputy

After a Published Decision by the Court of Appeal, filed May 27, 2014
Fifth Appellate District Case No. F066798

Appeal from the Superior Court of California, County of Fresno
Case No. 11CECG00726
Honorable Rosendo A. Pena, Jr.

**APPLICATION OF THE SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT FOR LEAVE TO FILE
BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY
AND [PROPOSED] BRIEF OF *AMICUS CURIAE***

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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CLERK SUPREME COURT

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**TO THE HONORABLE CHIEF JUSTICE AND JUSTICES OF THE
SUPREME COURT:**

APPLICATION FOR LEAVE TO FILE *AMICUS CURIAE* BRIEF

Pursuant to Rule 8.520(f) of the California Rules of Court, the South Coast Air Quality Management District (SCAQMD) respectfully requests leave to file the attached *amicus curiae* brief. Because SCAQMD's position differs from that of either party, we request leave to submit this amicus brief in support of neither party.

HOW THIS BRIEF WILL ASSIST THE COURT

SCAQMD's proposed amicus brief takes a position on two of the issues in this case. In both instances, its position differs from that of either party. The issues are:

- 1) Does the California Environmental Quality Act (CEQA) require an environmental impact report (EIR) to correlate a project's air pollution emissions with specific levels of health impacts?
- 2) What is the proper standard of review for determining whether an EIR provides sufficient information on the health impacts caused by a project's emission of air pollutants?

This brief will assist the Court by discussing the practical realities of correlating identified air quality impacts with specific health outcomes. In short, CEQA requires agencies to provide detailed information about a project's air quality impacts that is sufficient for the public and decisionmakers to adequately evaluate the project and meaningfully understand its impacts. However, the level of analysis is governed by a rule of reason; CEQA only requires agencies to conduct analysis if it is reasonably feasible to do so.

With regard to health-related air quality impacts, an analysis that correlates a project's air pollution emissions with specific levels of health impacts will be feasible in some cases but not others. Whether it is feasible depends on a variety of factors, including the nature of the project and the nature of the analysis under consideration. The feasibility of analysis may also change over time as air districts and others develop new tools for measuring projects' air quality related health impacts. Because SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, it is uniquely situated to express an opinion on the extent to which the Court should hold that CEQA requires lead agencies to correlate air quality impacts with specific health outcomes.

SCAQMD can also offer a unique perspective on the question of the appropriate standard of review. SCAQMD submits that the proper standard of review for determining whether an EIR is sufficient as an informational document is more nuanced than argued by either party. In our view, this is a mixed question of fact and law. It includes determining whether additional analysis is feasible, which is primarily a factual question that should be reviewed under the substantial evidence standard. However, it also involves determining whether the omission of a particular analysis renders an EIR insufficient to serve CEQA's purpose as a meaningful, informational document. If a lead agency has not determined that a requested analysis is infeasible, it is the court's role to determine whether the EIR nevertheless meets CEQA's purposes, and courts should not defer to the lead agency's conclusions regarding the legal sufficiency of an EIR's analysis. The ultimate question of whether an EIR's analysis is "sufficient" to serve CEQA's informational purposes is predominately a question of law that courts should review de novo.

This brief will explain the rationale for these arguments and may assist the Court in reaching a conclusion that accords proper respect to a lead agency's factual conclusions while maintaining judicial authority over the ultimate question of what level of analysis CEQA requires.

STATEMENT OF INTEREST OF *AMICUS CURIAE*

The SCAQMD is the regional agency primarily responsible for air pollution control in the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of the Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410; Cal. Code Regs., tit. 17, § 60104.) The SCAQMD participates in the CEQA process in several ways. Sometimes it acts as a lead agency that prepares CEQA documents for projects. Other times it acts as a responsible agency when it has permit authority over some part of a project that is undergoing CEQA review by a different lead agency. Finally, SCAQMD also acts as a commenting agency for CEQA documents that it receives because it is a public agency with jurisdiction by law over natural resources affected by the project.

In all of these capacities, SCAQMD will be affected by the decision in this case. SCAQMD sometimes submits comments requesting that a lead agency perform an additional type of air quality or health impacts analysis. On the other hand, SCAQMD sometimes determines that a particular type of health impact analysis is not feasible or would not produce reliable and informative results. Thus, SCAQMD will be affected by the Court's resolution of the extent to which CEQA requires EIRs to correlate emissions and health impacts, and its resolution of the proper standard of review.

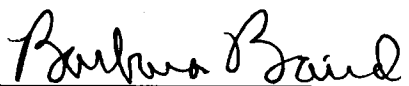
CERTIFICATION REGARDING AUTHORSHIP AND FUNDING

No party or counsel in the pending case authored the proposed amicus curiae brief in whole or in part, or made any monetary contribution intended to fund the preparation or submission of the brief. No person or entity other than the proposed *Amicus Curiae* made any monetary contribution intended to fund the preparation or submission of the brief.

Respectfully submitted,

DATED: April 3, 2015

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BRIEF OF AMICUS CURIAE

SUMMARY OF ARGUMENT

The South Coast Air Quality Management District (SCAQMD) submits that this Court should not try to establish a hard-and-fast rule concerning whether lead agencies are required to correlate emissions of air pollutants with specific health consequences in their environmental impact reports (EIR). The level of detail required in EIRs is governed by a few, core CEQA (California Environmental Quality Act) principles. As this Court has stated, “[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.” (*Laurel Heights Improvement Assn. v. Regents of the Univ of Cal.* (1988) 47 Cal.3d 376, 405 [*“Laurel Heights I”*]) Accordingly, “an agency must use its best efforts to find out and disclose all that it reasonably can.” (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428 (quoting CEQA Guidelines § 15144)¹). However, “[a]nalysis of environmental effects need not be exhaustive, but will be judged in light of what is reasonably feasible.” (*Association of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390; CEQA Guidelines §§ 15151, 15204(a).)

With regard to analysis of air quality related health impacts, EIRs must generally quantify a project’s pollutant emissions, but in some cases it is not feasible to correlate these emissions to specific, quantifiable health impacts (e.g., premature mortality; hospital admissions). In such cases, a general description of the adverse health impacts resulting from the pollutants at issue may be sufficient. In other cases, due to the magnitude

¹ The CEQA Guidelines are found at Cal. Code Regs., tit. 14 §§ 15000, *et seq.*

or nature of the pollution emissions, as well as the specificity of the project involved, it may be feasible to quantify health impacts. Or there may be a less exacting, but still meaningful analysis of health impacts that can feasibly be performed. In these instances, agencies should disclose those impacts.

SCAQMD also submits that whether or not an EIR complies with CEQA's informational mandates by providing sufficient, feasible analysis is a mixed question of fact and law. Pertinent here, the question of whether an EIR's discussion of health impacts from air pollution is sufficient to allow the public to understand and consider meaningfully the issues involves two inquiries: (1) Is it feasible to provide the information or analysis that a commenter is requesting or a petitioner is arguing should be required?; and (2) Even if it is feasible, is the agency relying on other policy or legal considerations to justify not preparing the requested analysis? The first question of whether an analysis is feasible is primarily a question of fact that should be judged by the substantial evidence standard. The second inquiry involves evaluating CEQA's information disclosure purposes against the asserted reasons to not perform the requested analysis. For example, an agency might believe that its EIR meets CEQA's informational disclosure standards even without a particular analysis, and therefore choose not to conduct that analysis. SCAQMD submits that this is more of a legal question, which should be reviewed de novo as a question of law.

ARGUMENT

I. RELEVANT FACTUAL AND LEGAL FRAMEWORK.

A. Air Quality Regulatory Background

The South Coast Air Quality Management District (SCAQMD) is one of the local and regional air pollution control districts and air quality

management districts in California. The SCAQMD is the regional air pollution agency for the South Coast Air Basin, which consists of all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. (Health & Saf. Code § 40410, 17 Cal. Code Reg. § 60104.) The SCAQMD also includes the Coachella Valley in Riverside County (Palm Springs area to the Salton Sea). (SCAQMD, *Final 2012 AQMP* (Feb. 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “chapter 7” hyperlink; pp 7-1, 7-3 (last visited Apr. 1, 2015).) The SCAQMD's jurisdiction includes over 16 million residents and has the worst or nearly the worst air pollution levels in the country for ozone and fine particulate matter. (SCAQMD, *Final 2012 AQMP* (Feb. 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Executive Summary” hyperlink p. ES-1 (last visited Apr. 1, 2015).)

Under California law, the local and regional districts are primarily responsible for controlling air pollution from all sources except motor vehicles. (Health & Saf. Code § 40000.) The California Air Resources Board (CARB), part of the California Environmental Protection Agency, is primarily responsible for controlling pollution from motor vehicles. (*Id.*) The air districts must adopt rules to achieve and maintain the state and federal ambient air quality standards within their jurisdictions. (Health & Saf. Code § 40001.)

The federal Clean Air Act (CAA) requires the United States Environmental Protection Agency (EPA) to identify pollutants that are widely distributed and pose a threat to human health, developing a so-called “criteria” document. (42 U.S.C. § 7408; CAA § 108.) These pollutants are frequently called “criteria pollutants.” EPA must then establish “national ambient air quality standards” at levels “requisite to protect public health”,

allowing “an adequate margin of safety.” (42 U.S.C. § 7409; CAA § 109.) EPA has set standards for six identified pollutants: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter (PM), and lead. (U.S. EPA, National Ambient Air Quality Standards (NAAQS), <http://www.epa.gov/air/criteria.html> (last updated Oct. 21, 2014).)²

Under the Clean Air Act, EPA sets emission standards for motor vehicles and “nonroad engines” (mobile farm and construction equipment, marine vessels, locomotives, aircraft, etc.). (42 U.S.C. §§ 7521, 7547; CAA §§ 202, 213.) California is the only state allowed to establish emission standards for motor vehicles and most nonroad sources; however, it may only do so with EPA's approval. (42 U.S.C. §§ 7543(b), 7543(e); CAA §§ 209(b), 209(c).) Sources such as manufacturing facilities, power plants and refineries that are not mobile are often referred to as “stationary sources.” The Clean Air Act charges state and local agencies with the primary responsibility to attain the national ambient air quality standards. (42 U.S.C. § 7401(a)(3); CAA § 101(a)(3).) Each state must adopt and implement a plan including enforceable measures to achieve and maintain the national ambient air quality standards. (42 U.S.C. § 7410; CAA § 110.) The SCAQMD and CARB jointly prepare portion of the plan for the South Coast Air Basin and submit it for approval by EPA. (Health & Saf. Code §§ 40460, et seq.)

The Clean Air Act also requires state and local agencies to adopt a permit program requiring, among other things, that new or modified “major” stationary sources use technology to achieve the “lowest achievable emission rate,” and to control minor stationary sources as

² Particulate matter (PM) is further divided into two categories: fine particulate or PM_{2.5} (particles with a diameter of less than or equal to 2.5 microns) and coarse particulate (PM₁₀) (particles with a diameter of 10 microns or less). (U.S. EPA, Particulate Matter (PM), <http://www.epa.gov/airquality/particulatepollution/> (last visited Apr. 1, 2015).)

needed to help attain the standards. (42 U.S.C. §§ 7502(c)(5), 7503(a)(2), 7410(a)(2)(C); CAA §§ 172(c)(5), 173(a)(2), 110(a)(2)(C).) The air districts implement these permit programs in California. (Health & Saf. Code §§ 42300, et seq.)

The Clean Air Act also sets out a regulatory structure for over 100 so-called “hazardous air pollutants” calling for EPA to establish “maximum achievable control technology” (MACT) for sources of these pollutants. (42 U.S.C. § 7412(d)(2); CAA § 112(d)(2).) California refers to these pollutants as “toxic air contaminants” (TACs) which are subject to two state-required programs. The first program requires “air toxics control measures” for specific categories of sources. (Health & Saf. Code § 39666.) The other program requires larger stationary sources and sources identified by air districts to prepare “health risk assessments” for impacts of toxic air contaminants. (Health & Saf. Code §§ 44320(b), 44322, 44360.) If the health risk exceeds levels identified by the district as “significant,” the facility must implement a “risk reduction plan” to bring its risk levels below “significant” levels. Air districts may adopt additional more stringent requirements than those required by state law, including requirements for toxic air contaminants. (Health & Saf. Code § 41508; *Western Oil & Gas Assn. v. Monterey Bay Unified APCD* (1989) 49 Cal.3d 408, 414.) For example, SCAQMD has adopted a rule requiring new or modified sources to keep their risks below specified levels and use best available control technology (BACT) for toxics. (SCAQMD, *Rule 1401-New Source Review of Toxic Air Contaminants*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiv>; then follow “Rule 1401” hyperlink (last visited Apr. 1, 2015).)

B. The SCAQMD's Role Under CEQA

The California Environmental Quality Act (CEQA) requires public agencies to perform an environmental review and appropriate analysis for projects that they implement or approve. (Pub. Resources Code § 21080(a).) The agency with primary approval authority for a particular project is generally the “lead agency” that prepares the appropriate CEQA document. (CEQA Guidelines §§ 15050, 15051.) Other agencies having a subsequent approval authority over all or part of a project are called “responsible” agencies that must determine whether the CEQA document is adequate for their use. (CEQA Guidelines §§ 15096(c), 15381.) Lead agencies must also consult with and circulate their environmental impact reports to “trustee agencies” and agencies “with jurisdiction by law” including “authority over resources which may be affected by the project.” (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines §§ 15086(a)(3), 15073(c).) The SCAQMD has a role in all these aspects of CEQA.

Fulfilling its responsibilities to implement its air quality plan and adopt rules to attain the national ambient air quality standards, SCAQMD adopts a dozen or more rules each year to require pollution reductions from a wide variety of sources. The SCAQMD staff evaluates each rule for any adverse environmental impact and prepares the appropriate CEQA document. Although most rules reduce air emissions, they may have secondary environmental impacts such as use of water or energy or disposal of waste—e.g., spent catalyst from control equipment.³

³ The SCAQMD's CEQA program for its rules is a “Certified Regulatory Program” under which it prepares a “functionally equivalent” document in lieu of a negative declaration or EIR. (Pub. Resources Code § 21080.5, CEQA Guidelines § 15251(l).)

The SCAQMD also approves a large number of permits every year to construct new, modified, or replacement facilities that emit regulated air pollutants. The majority of these air pollutant sources have already been included in an earlier CEQA evaluation for a larger project, are currently being evaluated by a local government as lead agency, or qualify for an exemption. However, the SCAQMD sometimes acts as lead agency for major projects where the local government does not have a discretionary approval. In such cases, SCAQMD prepares and certifies a negative declaration or environmental impact report (EIR) as appropriate.⁴ SCAQMD evaluates perhaps a dozen such permit projects under CEQA each year. SCAQMD is often also a “responsible agency” for many projects since it must issue a permit for part of the projects (e.g., a boiler used to provide heat in a commercial building). For permit projects evaluated by another lead agency under CEQA, SCAQMD has the right to determine that the CEQA document is inadequate for its purposes as a responsible agency, but it may not do so because its permit program already requires all permitted sources to use the best available air pollution control technology. (SCAQMD, *Rule 1303(a)(1) – Requirements*, <http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book/regulation-xiii>; then follow “Rule 1303” hyperlink (last visited Apr. 1, 2015).)

Finally, SCAQMD receives as many as 60 or more CEQA documents each month (around 500 per year) in its role as commenting agency or an agency with “jurisdiction by law” over air quality—a natural resource affected by the project. (Pub. Resources Code §§ 21104(a), 21153; CEQA Guidelines § 15366(a)(3).) The SCAQMD staff provides comments on as many as 25 or 30 such documents each month.

⁴ The SCAQMD's permit projects are not included in its Certified Regulatory Program, and are evaluated under the traditional local government CEQA analysis. (Pub. Resources Code §§ 21150-21154.)

(SCAQMD Governing Board Agenda, Apr. 3, 2015, Agenda Item 16, Attachment A, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-april-3-2015>; then follow “16. Lead Agency Projects and Environmental Documents Received by SCAQMD” hyperlink (last visited Apr. 1, 2015).) Of course, SCAQMD focuses its commenting efforts on the more significant projects.

Typically, SCAQMD comments on the adequacy of air quality analysis, appropriateness of assumptions and methodology, and completeness of the recommended air quality mitigation measures. Staff may comment on the need to prepare a health risk assessment detailing the projected cancer and noncancer risks from toxic air contaminants resulting from the project, particularly the impacts of diesel particulate matter, which CARB has identified as a toxic air contaminant based on its carcinogenic effects. (California Air Resources Board, Resolution 98-35, Aug. 27, 1998, <http://www.arb.ca.gov/regact/diesltac/diesltac.htm>; then follow Resolution 98-35 hyperlink (last visited Apr. 1, 2015).) Because SCAQMD already requires new or modified stationary sources of toxic air contaminants to use the best available control technology for toxics and to keep their risks below specified levels, (SCAQMD Rule 1401, *supra*, note 15), the greatest opportunity to further mitigate toxic impacts through the CEQA process is by reducing emissions—particularly diesel emissions—from vehicles.

II. THIS COURT SHOULD NOT SET A HARD-AND-FAST RULE CONCERNING THE EXTENT TO WHICH AN EIR MUST CORRELATE A PROJECT’S EMISSION OF POLLUTANTS WITH RESULTING HEALTH IMPACTS.

Numerous cases hold that courts do not review the correctness of an EIR’s conclusions but rather its sufficiency as an informative document. (*Laurel Heights 1*, *supra*, 47 Cal.3d at p. 392; *Citizens of Goleta Valley v.*

Bd. of Supervisors (1990) 52 Cal.3d 553, 569; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1197.)

As stated by the Court of Appeal in this case, where an EIR has addressed a topic, but the petitioner claims that the information provided about that topic is insufficient, courts must “draw[] a line that divides *sufficient* discussions from those that are *insufficient*.” (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) The Court of Appeal readily admitted that “[t]he terms themselves – sufficient and insufficient – provide little, if any, guidance as to where the line should be drawn. They are simply labels applied once the court has completed its analysis.” (*Id.*)

The CEQA Guidelines, however, provide guidance regarding what constitutes a sufficient discussion of impacts. Section 15151 states that “the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.” Case law reflects this: “Analysis of environmental effects need not be exhaustive, but will be judged in light of what was reasonably feasible.” (*Association of Irrigated Residents v. County of Madera, supra*, 107 Cal.App.4th at p. 1390; see also CEQA Guidelines § 15204(a).)

Applying this test, this Court cannot realistically establish a hard-and-fast rule that an analysis correlating air pollution impacts of a project to quantified resulting health impacts is always required, or indeed that it is never required. Simply put, in some cases such an analysis will be “feasible”; in some cases it will not.

For example, air pollution control districts often require a proposed new source of toxic air contaminants to prepare a “health risk assessment” before issuing a permit to construct. District rules often limit the allowable cancer risk the new source may cause to the “maximally exposed individual” (worker and residence exposures). (See, e.g., SCAQMD Rule 1401(c)(8); 1401(d)(1), *supra* note 15.) In order to perform this analysis, it

is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). (SCAQMD, *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588)*, pp. 11-16; (last visited Apr. 1, 2015) [http://www.aqmd.gov/home/library/documents-support-material](http://www.aqmd.gov/home/library/documents-support-material;); "Guidelines" hyperlink; AB2588; then follow AB2588 Risk Assessment Guidelines hyperlink.)

Thus, it is feasible to determine the health risk posed by a new gas station locating at an intersection in a mixed use area, where receptor locations are known. On the other hand, it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk—it does not necessarily mean anyone will contract cancer as a result of the project.

In order to find the "cancer burden" or expected additional cases of cancer resulting from the project, it is also necessary to know the numbers and location of individuals living within the "zone of impact" of the project: i.e., those living in areas where the projected cancer risk from the project exceeds one in a million. (SCAQMD, Health Risk Assessment Summary form, <http://www.aqmd.gov/home/forms>; filter by "AB2588" category; then "Health Risk Assessment" hyperlink (last visited Apr. 1, 2015).) The affected population is divided into bands of those exposed to at least 1 in a million risk, those exposed to at least 10 in a million risk, etc. up to those exposed at the highest levels. (*Id.*) This data allows agencies to calculate an approximate number of additional cancer cases expected from

the project. However, it is not possible to predict which particular individuals will be affected.

For the so-called criteria pollutants⁵, such as ozone, it may be more difficult to quantify health impacts. Ozone is formed in the atmosphere from the chemical reaction of the nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. (U.S. EPA, Ground Level Ozone, <http://www.epa.gov/airquality/ozonepollution/> (last updated Mar. 25, 2015).) It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. (U.S. EPA, *Guideline on Ozone Monitoring Site Selection* (Aug. 1998) EPA-454/R-98-002 § 5.1.2, <http://www.epa.gov/ttnamti1/archive/cpreldoc.html> (last visited Apr. 1, 2015).) NO_x and VOC are known as “precursors” of ozone.

Scientifically, health effects from ozone are correlated with increases in the ambient level of ozone in the air a person breathes. (U.S. EPA, *Health Effects of Ozone in the General Population*, Figure 9, <http://www.epa.gov/apti/ozonehealth/population.html#levels> (last visited Apr. 1, 2015).) However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region. For example, the SCAQMD's 2012 AQMP showed that reducing NO_x by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion. (South Coast Air Quality Management District, *Final 2012 AQMP* (February 2013), <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan>; then follow “Appendix V: Modeling & Attainment Demonstrations” hyperlink,

⁵ See discussion of types of pollutants, *supra*, Part I.A.

pp. v-4-2, v-7-4, v-7-24.) SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects.

On the other hand, this type of analysis may be feasible for projects on a regional scale with very high emissions of NO_x and VOCs, where impacts are regional. For example, in 2011 the SCAQMD performed a health impact analysis in its CEQA document for proposed Rule 1315, which authorized various newly-permitted sources to use offsets from the districts “internal bank” of emission reductions. This CEQA analysis accounted for essentially *all* the increases in emissions due to new or modified sources in the District between 2010 and 2030.⁶ The SCAQMD was able to correlate this very large emissions increase (e.g., 6,620 pounds per day NO_x (1,208 tons per year), 89,180 pounds per day VOC (16,275 tons per year)) to expected health outcomes from ozone and particulate matter (e.g., 20 premature deaths per year and 89,947 school absences in the year 2030 due to ozone).⁷ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System* (see hyperlink in fn 6) at p. 4.1-35, Table 4.1-29.)

⁶ (SCAQMD Governing Board Agenda, February 4, 2011, Agenda Item 26, Attachment G, *Assessment for: Re-adoption of Proposed Rule 1315 – Federal New Source Review Tracking System, Vol. 1, p.4.0-6*, <http://www.aqmd.gov/home/library/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-february-4-2011>; the follow “26. Adopt Proposed Rule 1315 – Federal New Source Review Tracking System” (last visited April 1, 2015).)

⁷ The SCAQMD was able to establish the location of future NO_x and VOC emissions by assuming that new projects would be built in the same locations and proportions as existing stationary sources. This CEQA document was upheld by the Los Angeles County Superior Court in *Natural Res. Def. Council v SCAQMD*, Los Angeles Superior Court No. BS110792).

However, a project emitting only 10 tons per year of NO_x or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels. Thus, in this case it would not be feasible to directly correlate project emissions of VOC or NO_x with specific health impacts from ozone. This is in part because ozone formation is not linearly related to emissions. Ozone impacts vary depending on the location of the emissions, the location of other precursor emissions, meteorology and seasonal impacts, and because ozone is formed some time later and downwind from the actual emission. (EPA Guideline on Ozone Monitoring Site Selection (Aug. 1998) EPA-454/R-98-002, § 5.1.2; <https://www.epa.gov/ttnamti1/archive/cpreldoc.html>; then search “Guideline on Ozone Monitoring Site Selection” click on pdf) (last viewed Apr. 1, 2015).)

SCAQMD has set its CEQA “significance” threshold for NO_x and VOC at 10 tons per year (expressed as 55 lb/day). (SCAQMD, *Air Quality Analysis Handbook*, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>; then follow “SCAQMD Air Quality Significance Thresholds” hyperlink (last visited Apr. 1, 2015).) This is because the federal Clean Air Act defines a “major” stationary source for “extreme” ozone nonattainment areas such as SCAQMD as one emitting 10 tons/year. (42 U.S.C. §§ 7511a(e), 7511a(f); CAA §§ 182(e), 182(f).) Under the Clean Air Act, such sources are subject to enhanced control requirements (42 U.S.C. §§ 7502(c)(5), 7503; CAA §§ 172(c)(5), 173), so SCAQMD decided this was an appropriate threshold for making a CEQA “significance” finding and requiring feasible mitigation. Essentially, SCAQMD takes the position that a source that emits 10 tons/year of NO_x or VOC would contribute cumulatively to ozone formation. Therefore, lead agencies that use SCAQMD’s thresholds of significance may determine

that many projects have “significant” air quality impacts and must apply all feasible mitigation measures, yet will not be able to precisely correlate the project to quantifiable health impacts, unless the emissions are sufficiently high to use a regional modeling program.

In the case of particulate matter (PM_{2.5})⁸, another “criteria” pollutant, SCAQMD staff is aware of two possible methods of analysis. SCAQMD used regional modeling to predict expected health impacts from its proposed Rule 1315, as mentioned above. Also, the California Air Resources Board (CARB) has developed a methodology that can predict expected mortality (premature deaths) from large amounts of PM_{2.5}. (California Air Resources Board, *Health Impacts Analysis: PM Premature Death Relationship*, http://www.arb.ca.gov/research/health/pm-mort/pm-mort_arch.htm (last reviewed Jan. 19, 2012).) SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1837 lbs/day). (Final Environmental Assessment for Rule 1315, *supra*, pp 4.0-12, 4.1-13, 4.1-37 (e.g., 125 premature deaths in the entire SCAQMD in 2030), 4.1-39 (0.05 to 1.77 annual premature deaths from power plants.) Again, this project involved large amounts of additional PM_{2.5} in the District, up to 2.82 tons/day (5,650 lbs/day of PM_{2.5}, or, or 1029 tons/year. (*Id.* at table 4.1-4, p. 4.1-10.)

However, the primary author of the CARB methodology has reported that this PM_{2.5} health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties.⁹ (SCAQMD, *Final Subsequent Mitigated Negative Declaration for: Warren*

⁸ SCAQMD has not attained the latest annual or 24-hour national ambient air quality standards for “PM_{2.5}” or particulate matter less than 2.5 microns in diameter.

⁹ Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts. (*Id.* at p. 2-24.)

E&P, Inc. WTU Central Facility, New Equipment Project (certified July 19, 2011), <http://www.aqmd.gov/home/library/documents-support-material/lead-agency-permit-projects/permit-project-documents---year-2011>; then follow “Final Subsequent Mitigated Negative Declaration for Warren E&P Inc. WTU Central Facility, New Equipment Project” hyperlink, pp. 2-22, 2-23 (last visited Apr. 1, 2015).) Therefore, when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small PM_{2.5} increases (3.8 lb/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated PM_{2.5} emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so. (*Id.* at pp 2-22 to 2-24.) SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information. (*Id.* at pp. 2-23, 2-25.) This CEQA document was not challenged in court.

In the above case, while it may have been technically possible to plug the data into the methodology, the results would not have been reliable or meaningful. SCAQMD believes that an agency should not be required to perform analyses that do not produce reliable or meaningful results. This Court has already held that an agency may decline to use even the “normal” “existing conditions” CEQA baseline where to do so would be misleading or without informational value. (*Neighbors for Smart Rail v. Exposition Metro Line* (2013) 57 Cal.4th 439, 448, 457.) The same should be true for a decision that a particular study or analysis would not provide reliable or meaningful results.¹⁰

¹⁰ Whether a particular study would result in “informational value” is a part of deciding whether it is “feasible.” CEQA defines “feasible” as “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and

Therefore, it is not possible to set a hard-and-fast rule on whether a correlation of air quality impacts with specific quantifiable health impacts is required in all cases. Instead, the result turns on whether such an analysis is reasonably feasible in the particular case.¹¹ Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths. (California Air Resources Board, *Health Impacts Analysis: PM Mortality Relationship*, <http://www.arb.ca.gov/research/health/pm-mort/pm-mort.htm> (last reviewed Dec. 29, 2010).) This factor also counsels against setting any hard-and-fast rule in this case.

III. THE QUESTION OF WHETHER AN EIR CONTAINS SUFFICIENT ANALYSIS TO MEET CEQA'S REQUIREMENTS IS A MIXED QUESTION OF FACT AND LAW GOVERNED BY TWO DIFFERENT STANDARDS OF REVIEW.

A. Standard of Review for Feasibility Determination and Sufficiency as an Informative Document

A second issue in this case is whether courts should review an EIR's informational sufficiency under the "substantial evidence" test as argued by Friant Ranch or the "independent judgment" test as argued by Sierra Club.

technological factors." (Pub. Resources Code § 21061.1.) A study cannot be "accomplished in a *successful* manner" if it produces unreliable or misleading results.

¹¹ In this case, the lead agency did not have an opportunity to determine whether the requested analysis was feasible because the comment was non-specific. Therefore, SCAQMD suggests that this Court, after resolving the legal issues in the case, direct the Court of Appeal to remand the case to the lead agency for a determination of whether the requested analysis is feasible. Because Fresno County, the lead agency, did not seek review in this Court, it seems likely that the County has concluded that at least some level of correlation of air pollution with health impacts is feasible.

As this Court has explained, “a reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts.” (*Vineyard Area Citizens v. City of Rancho Cordova*, *supra*, 40 Cal.4th at 435.) For questions regarding compliance with proper procedure or other legal questions, courts review an agency’s action de novo under the “independent judgment” test. (*Id.*) On the other hand, courts review factual disputes only for substantial evidence, thereby “accord[ing] greater deference to the agency’s substantive factual conclusions.” (*Id.*)

Here, Friant Ranch and Sierra Club agree that the case involves the question of whether an EIR includes sufficient information regarding a project’s impacts. However, they disagree on the proper standard of review for answering this question: Sierra Club contends that courts use the independent judgment standard to determine whether an EIR’s analysis is sufficient to meet CEQA’s informational purposes,¹² while Friant Ranch contends that the substantial evidence standard applies to this question.

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¹² Sierra Club acknowledges that courts use the substantial evidence standard when reviewing predicate factual issues, but argues that courts ultimately decide as a matter of law what CEQA requires. (Answering Brief, pp. 14, 23.)

SCAQMD submits that the issue is more nuanced than either party contends. We submit that, whether a CEQA document includes sufficient analysis to satisfy CEQA's informational mandates is a mixed question of fact and law,¹³ containing two levels of inquiry that should be judged by different standards.¹⁴

The state CEQA Guidelines set forth standards for the adequacy of environmental analysis. Guidelines Section 15151 states:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good-faith effort at full disclosure.

In this case, the basic question is whether the underlying analysis of air quality impacts made the EIR "sufficient" as an informative document. However, whether the EIR's analysis was sufficient is judged in light of what was reasonably feasible. This represents a mixed question of fact and law that is governed by two different standards of review.

¹³ Friant Ranch actually states that the claim that an EIR lacks sufficient relevant information is, "most properly thought of as raising mixed questions of fact and law." (Opening Brief, p. 27.) However, the remainder of its argument claims that the court should apply the substantial evidence standard of review to all aspects of the issue.

¹⁴ Mixed questions of fact and law issues may implicate predominantly factual subordinate questions that are reviewed under the substantial evidence test even though the ultimate question may be reviewed by the independent judgment test. *Crocker National Bank v. City and County of San Francisco* (1989) 49 Cal.3d 881, 888-889.

SCAQMD submits that an EIR's sufficiency as an informational document is ultimately a legal question that courts should determine using their independent judgment. This Court's language in *Laurel Heights I* supports this position. As this Court explained: "The court does not pass upon the correctness of the EIR's environmental conclusions, but only upon its *sufficiency as an informative document*." (*Laurel Heights I, supra*, 47 Cal.3d at 392-393) (emphasis added.) As described above, the Court in *Vineyard Area Citizens v. City of Rancho Cordova, supra*, 40 Cal.4th at 431, also used its independent judgment to determine what level of analysis CEQA requires for water supply impacts. The Court did not defer to the lead agency's opinion regarding the law's requirements; rather, it determined for itself what level of analysis was necessary to meet "[t]he law's informational demands." (*Id.* at p. 432.) Further, existing case law also holds that where an agency fails to comply with CEQA's information disclosure requirements, the agency has "failed to proceed in the manner required by law." (*Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 118.)

However, whether an EIR satisfies CEQA's requirements depends in part on whether it was reasonably feasible for an agency to conduct additional or more thorough analysis. EIRs must contain "a detailed statement" of a project's impacts (Pub. Res. Code § 21061), and an agency must "use its best efforts to find out and disclose all that it reasonably can." (CEQA Guidelines § 15144.) Nevertheless, "the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible." (CEQA Guidelines § 15151.)

SCAQMD submits that the question of whether additional analysis or a particular study suggested by a commenter is "feasible" is generally a question of fact. Courts have already held that whether a particular alternative is "feasible" is reviewed by the substantial evidence test.

(*Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 598-99; *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 883.) Thus, if a lead agency determines that a particular study or analysis is infeasible, that decision should generally be judged by the substantial evidence standard. However, SCAQMD urges this Court to hold that lead agencies must explain the basis of any determination that a particular analysis is infeasible in the EIR itself. An EIR must discuss information, including issues related to the feasibility of particular analyses “in sufficient detail to enable meaningful participation and criticism by the public. ‘[W]hatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.’” (*Laurel Heights I, supra*, 47 Cal.3d at p. 405 (quoting *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831) (discussing analysis of alternatives).) The evidence on which the determination is based should also be summarized in the EIR itself, with appropriate citations to reference materials if necessary. Otherwise commenting agencies such as SCAQMD would be forced to guess where the lead agency's evidence might be located, thus thwarting effective public participation.

Moreover, if a lead agency determines that a particular study or analysis would not result in reliable or useful information and for that reason is not feasible, that determination should be judged by the substantial evidence test. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority, supra*, 57 Cal.4th 439, 448, 457:

whether “existing conditions” baseline would be misleading or uninformative judged by substantial evidence standard.¹⁵)

If the lead agency’s determination that a particular analysis or study is not feasible is supported by substantial evidence, then the agency has not violated CEQA’s information disclosure provisions, since it would be infeasible to provide additional information. This Court’s decisions provide precedent for such a result. For example, this Court determined that the issue of whether the EIR should have included a more detailed discussion of future herbicide use was resolved because substantial evidence supported the agency’s finding that “the precise parameters of future herbicide use could not be predicted.” *Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Protection* (2008) 43 Cal.4th 936, 955.

Of course, SCAQMD expects that courts will continue to hold lead agencies to their obligations to consult with, and not to ignore or misrepresent, the views of sister agencies having special expertise in the area of air quality. (*Berkeley Keep Jets Over the Bay v. Board of Port Commissioners* (2007) 91 Cal.App.4th 1344, 1364 n.11.) In some cases, information provided by such expert agencies may establish that the purported evidence relied on by the lead agency is not in fact “substantial”. (*Id.* at pp. 1369-1371.)

In sum, courts retain ultimate responsibility to determine what CEQA requires. However, the law does not require exhaustive analysis, but only what is reasonably feasible. Agencies deserve deference for their factual determinations regarding what type of analysis is reasonably feasible. On the other hand, if a commenter requests more information, and the lead agency declines to provide it but does *not* determine that the

¹⁵ The substantial evidence standard recognizes that the courts “have neither the resources nor the scientific expertise” to weigh conflicting evidence on technical issues. (*Laurel Heights I, supra*, 47 Cal.3d 376, 393.)

requested study or analysis would be infeasible, misleading or uninformative, the question becomes whether the omission of that analysis renders the EIR inadequate to satisfy CEQA's informational purposes. (*Id.* at pp. 1370-71.) Again, this is predominantly a question of law and should be judged by the de novo or independent judgment standard of review. Of course, this Court has recognized that a "project opponent or reviewing court can always imagine some additional study or analysis that might provide helpful information. It is not for them to design the EIR. That further study...might be helpful does not make it necessary." (*Laurel Heights I, supra*, 47 Cal.3d 376, 415 – see also CEQA Guidelines § 15204(a) [CEQA "does not require a lead agency to conduct every test. . . recommended or demanded by commenters."].) Courts, then, must adjudicate whether an omission of particular information renders an EIR inadequate to serve CEQA's informational purposes.¹⁶

¹⁶ We recognize that there is case law stating that the substantial evidence standard applies to "challenges to the scope of an EIR's analysis of a topic" as well as the methodology used and the accuracy of the data relied on in the document "because these types of challenges involve factual questions." (*Bakersfield Citizens for Local Control v. City of Bakersfield, supra*, 124 Cal.App.4th 1184, 1198, and cases relied on therein.) However, we interpret this language to refer to situations where the question of the scope of the analysis really is factual—that is, where it involves whether further analysis is feasible, as discussed above. This interpretation is supported by the fact that the *Bakersfield* court expressly rejected an argument that a claimed "omission of information from the EIR should be treated as inquiries whether there is substantial evidence supporting the decision approving the project." *Bakersfield, supra*, 124 Cal.App.4th at p. 1208. And the *Bakersfield* court ultimately decided that the lead agency must analyze the connection between the identified air pollution impacts and resulting health impacts, even though the EIR already included some discussion of air-pollution-related respiratory illnesses. *Bakersfield, supra*, 124 Cal.App.4th at p. 1220. Therefore, the court must not have interpreted this question as one of the "scope of the analysis" to be judged by the substantial evidence standard.

B. Friant Ranch's Rationale for Rejecting the Independent Judgment Standard of Review is Unsupported by Case Law.

In its brief, Friant Ranch makes a distinction between cases where a required CEQA topic is not discussed at all (to be reviewed by independent judgment as a failure to proceed in the manner required by law) and cases where a topic is discussed, but the commenter claims the information provided is insufficient (to be judged by the substantial evidence test). (Opening Brief, pp. 13-17.) The Court of Appeal recognized these two types of cases, but concluded that both raised questions of law. (*Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704 (superseded by grant of review) 172 Cal.Rptr.3d 271, 290.) We believe the distinction drawn by Friant Ranch is unduly narrow, and inconsistent with cases which have concluded that CEQA documents are insufficient. In many instances, CEQA's requirements are stated broadly, and the courts must interpret the law to determine what level of analysis satisfies CEQA's mandate for providing meaningful information, even though the EIR discusses the issue to some extent.

For example, the CEQA Guidelines require discussion of the existing environmental baseline. In *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 954-955, the lead agency had discussed the environmental baseline by describing historic month-end water levels in the affected lakes. However, the court held that this was not an adequate baseline discussion because it failed to discuss the timing and amounts of past actual water releases, to allow comparison with the proposed project. The court evidently applied the independent judgment test to its decision, even though the agency discussed the issue to some extent.

Likewise, in *Vineyard Area Citizens* (2007) 40 Cal.4th 412, this Court addressed the question of whether an EIR's analysis of water supply impacts complied with CEQA. The parties agreed that the EIR was required to analyze the effects of providing water to the development project, "and that in order to do so the EIR had, in some manner, to identify the planned sources of that water." (*Vineyard Area Citizens, supra*, at p. 428.) However, the parties disagreed as to the level of detail required for this analysis and "what level of uncertainty regarding the availability of water supplies can be tolerated in an EIR" (*Id.*) In other words, the EIR had analyzed water supply impacts for the project, but the petitioner claimed that the analysis was insufficient.

This Court noted that neither CEQA's statutory language or the CEQA Guidelines specifically addressed the question of how precisely an EIR must discuss water supply impacts. (*Id.*) However, it explained that CEQA "states that '[w]hile foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.'" (*Id.*, [Guidelines § 15144].) The Court used this general principle, along with prior precedent, to elucidate four "principles for analytical adequacy" that are necessary in order to satisfy "CEQA's informational purposes." (*Vineyard Area Citizens, supra*, at p. 430.) The Court did not defer to the agency's determination that the EIR's analysis of water supply impacts was sufficient. Rather, this Court used its independent judgment to determine for itself the level of analysis required to satisfy CEQA's fundamental purposes. (*Vineyard Area Citizens, supra*, at p. 441: an EIR does not serve its purposes where it neglects to explain likely sources of water and "... leaves long term water supply considerations to later stages of the project.")

Similarly, the CEQA Guidelines require an analysis of noise impacts of the project. (Appendix G, “Environmental Checklist Form.”¹⁷) In *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1123, the court held that the lead agency’s noise impact analysis was inadequate even though it had addressed the issue and concluded that the increase would not be noticeable. If the court had been using the substantial evidence standard, it likely would have upheld this discussion.

Therefore, we do not agree that the issue can be resolved on the basis suggested by Friant Ranch, which would apply the substantial evidence standard to *every* challenge to an analysis that addresses a required CEQA topic. This interpretation would subvert the courts’ proper role in interpreting CEQA and determining what the law requires.

Nor do we agree that the Court of Appeal in this case violated CEQA’s prohibition on courts interpreting its provisions “in a manner which imposes procedural or substantive requirements beyond those explicitly stated in this division or in the state guidelines.” (Pub. Resources Code § 21083.1.) CEQA requires an EIR to describe *all* significant impacts of the project on the environment. (Pub. Resources Code § 21100(b)(2); *Vineyard Area Citizens, supra*, at p. 428.) Human beings are part of the environment, so CEQA requires EIRs to discuss a project’s significant impacts on human health. However, except in certain particular circumstances,¹⁸ neither the CEQA statute nor Guidelines specify the precise level of analysis that agencies must undertake to satisfy the law’s requirements. (see, e.g., CEQA Guidelines § 15126.2(a) [EIRs must describe “health and safety problems caused by {a project’s} physical changes”].) Accordingly, courts must interpret CEQA as a whole to

¹⁷ Association of Environmental Professionals, 2015 CEQA Statute and Guidelines (2015) p.287.

¹⁸ E.g., Pub. Resources Code § 21151.8(C)(3)(B)(iii) (requiring specific type of health risk analysis for siting schools).

determine whether a particular EIR is sufficient as an informational document. A court determining whether an EIR's discussion of human health impacts is legally sufficient does not constitute imposing a new substantive requirement.¹⁹ Under Friant Ranch's theory, the above-referenced cases holding a CEQA analysis inadequate would have violated the law. This is not a reasonable interpretation.

IV. COURTS MUST SCRUPULOUSLY ENFORCE THE REQUIREMENTS THAT LEAD AGENCIES CONSULT WITH AND OBTAIN COMMENTS FROM AIR DISTRICTS

Courts must "scrupulously enforce" CEQA's legislatively mandated requirements. (*Vineyard Area Citizens, supra*, 40 Cal.4th 412, 435.) Case law has firmly established that lead agencies must consult with the relevant air pollution control district before conducting an initial study, and must provide the districts with notice of the intention to adopt a negative declaration (or EIR). (*Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 958.) As *Schenck* held, neither publishing the notice nor providing it to the State Clearinghouse was a sufficient substitute for sending notice directly to the air district. (*Id.*) Rather, courts "must be satisfied that [administrative] agencies have fully complied with the procedural requirements of CEQA, since only in this way can the important public purposes of CEQA be protected from subversion." *Schenck*, 198 Cal.App.4th at p. 959 (citations omitted).²⁰

¹⁹ We submit that Public Resources Code Section 21083.1 was intended to prevent courts from, for example, holding that an agency must analyze economic impacts of a project where there are no resulting environmental impacts (see CEQA Guidelines § 15131), or imposing new procedural requirements, such as imposing additional public notice requirements not set forth in CEQA or the Guidelines.

²⁰ Lead agencies must consult air districts, as public agencies with jurisdiction by law over resources affected by the project, *before* releasing an EIR. (Pub. Resources Code §§ 21104(a); 21153.) Moreover, air

Lead agencies should be aware, therefore, that failure to properly seek and consider input from the relevant air district constitutes legal error which may jeopardize their project approvals. For example, the court in *Fall River Wild Trout Foundation v. County of Shasta*, (1999) 70 Cal.App.4th 482, 492 held that the failure to give notice to a trustee agency (Department of Fish and Game) was prejudicial error requiring reversal. The court explained that the lack of notice prevented the Department from providing any response to the CEQA document. (*Id.* at p. 492.) It therefore prevented relevant information from being presented to the lead agency, which was prejudicial error because it precluded informed decision-making. (*Id.*)²¹

districts should be considered “state agencies” for purposes of the requirement to consult with “trustee agencies” as set forth in Public Resources Code § 20180.3(a). This Court has long ago held that the districts are not mere “local agencies” whose regulations are superseded by those of a state agency regarding matters of statewide concern, but rather have concurrent jurisdiction over such issues. (*Orange County Air Pollution Control District v. Public Util. Com.* (1971) 4 Cal.3d 945, 951, 954.) Since air pollution is a matter of statewide concern, *Id.* at 952, air districts should be entitled to trustee agency status in order to ensure that this vital concern is adequately protected during the CEQA process.

²¹ In *Schenck*, the court concluded that failure to give notice to the air district was not prejudicial, but this was partly because the trial court had already corrected the error before the case arrived at the Court of Appeal. The trial court issued a writ of mandate requiring the lead agency to give notice to the air district. The air district responded by concurring with the lead agency that air impacts were not significant. (*Schenck*, 198 Cal.App.4th 949, 960.) We disagree with the *Schenck* court that the failure to give notice to the air district would not have been prejudicial (even in the absence of the trial court writ) merely because the lead agency purported to follow the air district’s published CEQA guidelines for significance. (*Id.*, 198 Cal.App.4th at p. 960.) In the first place, absent notice to the air district, it is uncertain whether the lead agency properly followed those guidelines. Moreover, it is not realistic to expect that an air district’s published guidelines would necessarily fully address all possible air-quality related issues that can arise with a CEQA project, or that those

Similarly, lead agencies must obtain additional information requested by expert agencies, including those with jurisdiction by law, if that information is necessary to determine a project's impacts. (*Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236-37.) Approving a project without obtaining that information constitutes a failure to proceed in the manner prescribed by CEQA. (*Id.* at p. 1236.)

Moreover, a lead agency can save significant time and money by consulting with the air district early in the process. For example, the lead agency can learn what the air district recommends as an appropriate analysis on the facts of its case, including what kinds of health impacts analysis may be available, and what models are appropriate for use. This saves the lead agency from the need to do its analysis all over again and possibly needing to recirculate the document after errors are corrected, if new significant impacts are identified. (CEQA Guidelines § 15088.5(a).) At the same time, the air district's expert input can help the lead agency properly determine whether another commenter's request for additional analysis or studies is reasonable or feasible. Finally, the air district can provide input on what mitigation measures would be feasible and effective.

Therefore, we suggest that this Court provide guidance to lead agencies reminding them of the importance of consulting with the relevant air districts regarding these issues. Otherwise, their feasibility decisions may be vulnerable to air district evidence that establishes that there is no substantial evidence to support the lead agency decision not to provide specific analysis. (*See Berkeley Keep Jets Over the Bay, supra*, 91 Cal.App.4th 1344, 1369-1371.)

guidelines would necessarily be continually modified to reflect new developments. Therefore we believe that, had the trial court not already ordered the lead agency to obtain the air district's views, the failure to give notice would have been prejudicial, as in *Fall River, supra*, 70 Cal.App.4th 482, 492.

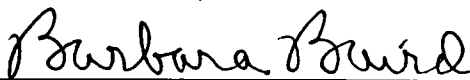
CONCLUSION

The SCAQMD respectfully requests this Court *not* to establish a hard-and-fast rule concerning whether CEQA requires a lead agency to correlate identified air quality impacts of a project with resulting health outcomes. Moreover, the question of whether an EIR is “sufficient as an informational document” is a mixed question of fact and law containing two levels of inquiry. Whether a particular proposed analysis is feasible is predominantly a question of fact to be judged by the substantial evidence standard of review. Where the requested analysis is feasible, but the lead agency relies on legal or policy reasons not to provide it, the question of whether the EIR is nevertheless sufficient as an informational document is predominantly a question of law to be judged by the independent judgment standard of review.

DATED: April 3, 2015

Respectfully submitted,

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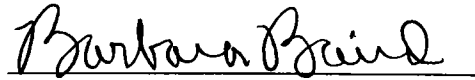
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

CERTIFICATE OF WORD COUNT

Pursuant to Rule 8.520(c)(1) of the California Rules of Court, I hereby certify that this brief contains 8,476 words, including footnotes, but excluding the Application, Table of Contents, Table of Authorities, Certificate of Service, this Certificate of Word Count, and signature blocks. I have relied on the word count of the Microsoft Word Vista program used to prepare this Certificate.

DATED: April 3, 2015

Respectfully submitted,


Barbara Baird

PROOF OF SERVICE

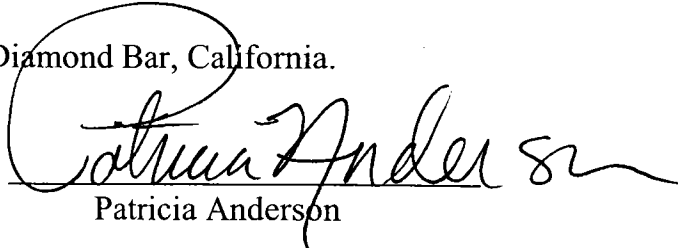
I am employed in the County of Los Angeles, California. I am over the age of 18 years and not a party to the within action. My business address is 21865 Copley Drive, Diamond Bar, California 91765.

On April 3, 2015 I served true copies of the following document(s) described as **APPLICATION OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE* IN SUPPORT OF NEITHER PARTY AND [PROPOSED] BRIEF OF *AMICUS CURIAE*** by placing a true copy of the foregoing document(s) in a sealed envelope addressed as set forth on the attached service list as follows:

BY MAIL: I enclosed the document(s) in a sealed envelope or package addressed to the persons at the addresses listed in the Service List and placed the envelope for collection and mailing following our ordinary business practices. I am readily familiar with this District's practice for collection and processing of correspondence for mailing. Under that practice, the correspondence would be deposited with the United States Postal Service, with postage thereon fully prepaid at Diamond Bar, California, in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on April 3, 2015 at Diamond Bar, California.


Patricia Anderson

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