



Slover and Cactus Warehouse

AIR QUALITY IMPACT ANALYSIS

COUNTY OF SAN BERNARDINO

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LIST OF ABBREVIATED TERMS

(1)	Reference
$\mu\text{g}/\text{m}^3$	Microgram per Cubic Meter
AADT	Annual Average Daily Trips
AQ	Air Quality
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
BBAQMD	Bay Area Air Quality Management District
BC	Black Carbon
BP	Business Park
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EIR	Environmental Impact Reports
EPA	Environmental Protection Agency
ETW	Equivalent Test Weight
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
HDT	Heavy Duty Trucks
HHDT	Heavy-Heavy Duty Trucks
LDA	Light Duty Automobiles
LHD	Light Heavy Duty
LI	Light Industrial

LST	Localized Significance Threshold
MATES	Multiple Air Toxics Exposure Study
MHD	Medium Heavy Duty
MM	Mitigation Measures
NAAQS	National Ambient Air Quality Standards
NCHRP	National Cooperative Highway Research Program
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
O ₃	Ozone
OBD-II	On-Board Diagnostic
Pb	Lead
PM ₁₀	Particulate Matter 10 microns in diameter or less
PM _{2.5}	Particulate Matter 2.5 microns in diameter or less
POLA	Port of Los Angeles
POLB	Port of Long Beach
PPM	Parts Per Million
Project	Slover and Cactus Warehouse
RECLAIM	Regional Clean Air Incentives Market
RFG-2	Reformulated Gasoline Regulation
ROG	Reactive Organic Gases
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SO ₂	Sulfur Dioxide
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TIA	Traffic Impact Analysis
TOG	Total Organic Gases
UFP	Ultra Fine Particles
URBEMIS	Urban Emissions
UTRs	Utility Tractors
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
VPH	Vehicles Per Hour

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EXECUTIVE SUMMARY

The results of this *Slover and Cactus 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>Potentially Significant</i>	<i>Less Than Significant</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>Potentially Significant</i>	<i>Less Than Significant</i>

ES.1 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 County 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 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3).

BACM AQ-1

The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to (2):

- 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 limited to 15 miles per hour or less.

BACM AQ-2

The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113 (3):

- Only “Low-Volatile Organic Compounds” paints (no more than 50 gram/liter of VOC) consistent with South Coast Air Quality Management District Rule 1113 shall be used.

BACM AQ-3

Plans, specifications, and contract documents shall note that a sign shall be posted on-site stating that construction workers shall not idle diesel engines in excess of five (5) minutes (4).

ES.2 CONSTRUCTION-SOURCE MITIGATION MEASURES

MM AQ-1

During the site preparation phase, construction equipment greater than 150 horsepower (>150 HP), the Construction Contractor shall use off-road diesel construction equipment that complies with EPA/CARB Tier 3 emissions standards and will ensure that all construction equipment be tuned and maintained in accordance with the manufacturer’s specifications.

ES.3 OPERATIONAL-SOURCE EMISSIONS MITIGATION MEASURES

Project operational-source emissions will be less than significant. Therefore, no mitigation measures are required.

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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 Slover and Cactus 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 Southern California Air Quality Management District (SCAQMD).

1.1 SITE LOCATION

The proposed Slover and Cactus Warehouse Project is located on the southwest corner of Cactus Avenue and Slover Avenue in unincorporated County of San Bernardino, as shown on Exhibit 1-A. The Project site is located roughly 150 feet south of an existing Union Pacific (UP) railroad yard and approximately 1,800 feet south of Interstate 10 (I-10). The Project site is mostly vacant, with three existing residential homes located in the western and southeastern portions of the site.

1.2 PROJECT DESCRIPTION

It is our understanding that the Project is proposed to consist of up to 257,855 square feet (sf) of warehouse use, as shown on Exhibit 1-B. For the purposes of this analysis, the Project is anticipated to be developed in a single phase with an Opening Year of 2020.

Per the *Slover and Cactus Warehouse Traffic Impact Analysis* (TIA) prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 449 trip-ends per day (actual vehicles) (5). The net Project trip generation includes 90 truck trip-ends per day.

EXHIBIT 1-A: LOCATION MAP

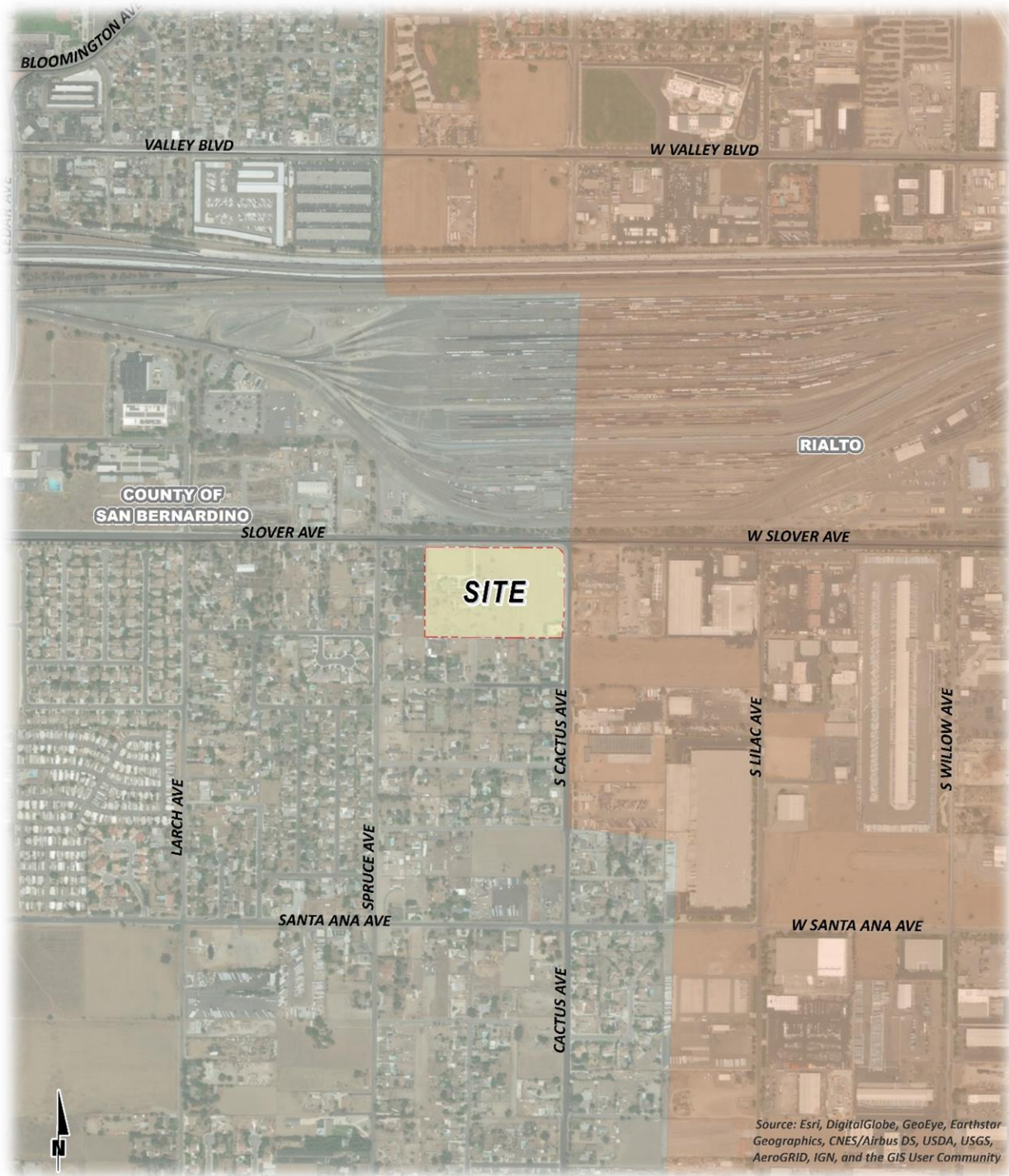
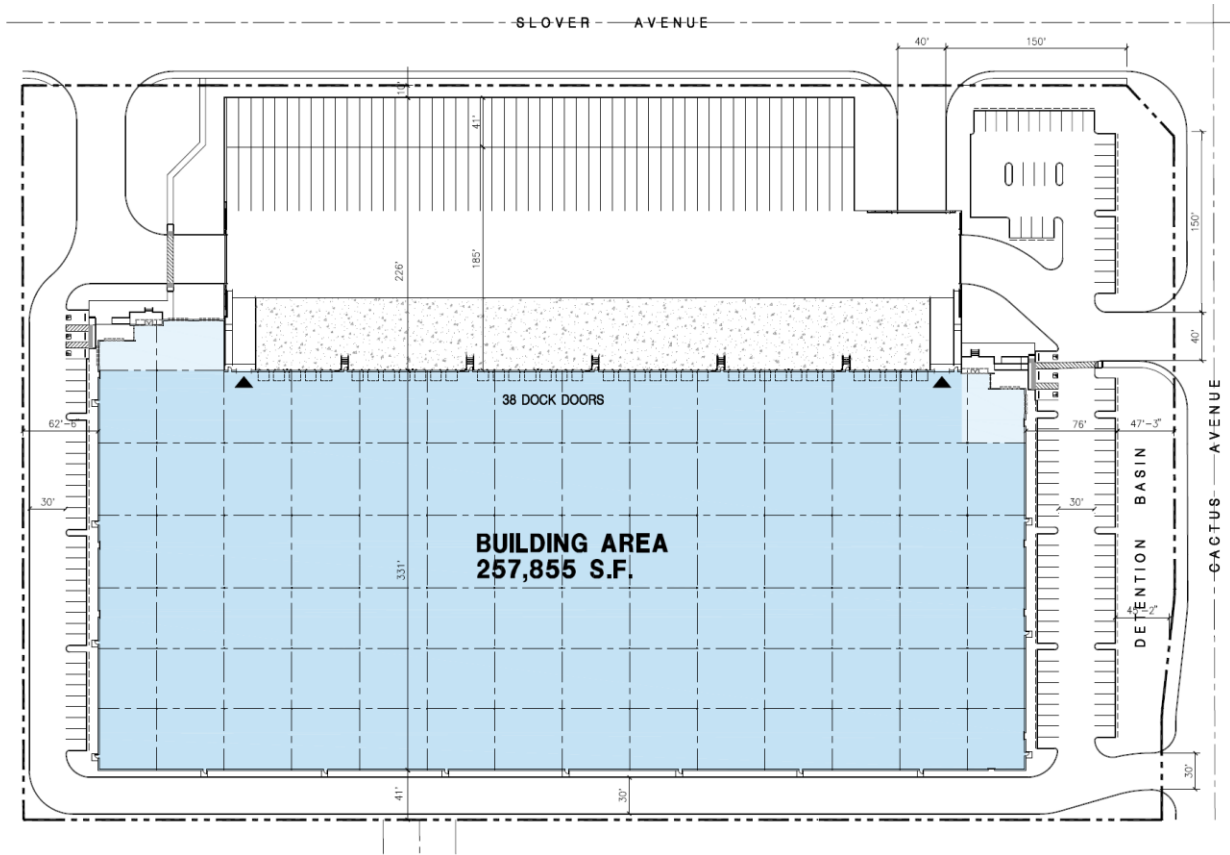


EXHIBIT 1-B: SITE PLAN



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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 (6). 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 (7):

- 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 (8).

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. Attainment status for a pollutant means that the Air District meets the standards set by the U.S. EPA or the California EPA. Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (9).

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

Ambient Air Quality Standards (Updated 5/4/16)							
Pollutant	Averaging Time	California Standards ¹		National Standards ²			
		Concentration ³	Method ⁴	Primary ^{5a}	Secondary ^{5b}	Method ⁶	
Ozone (O ₃) ⁷	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) ⁸	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) ¹²	—		
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹²	—		
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) ¹⁴	Same as Primary Standard		
	Rolling 3-Month Average	—		0.15 µg/m ³			
Visibility Reducing Particles ¹⁵	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 ¹⁶	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				
See footnotes on next page ...							

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, PM_{2.5}, 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 PM_{2.5}, 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 CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} 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 PM_{2.5} 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 SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

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

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: carbon monoxide, lead, ozone, particulate matter, nitrogen dioxide, and sulfur dioxide 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 (10). On February 20, 2019, ARB posted the 2018 amendments to the state and national area designations. See Table 2-2 for attainment designations for the SCAB (11). 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 SCAB

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	--
Ozone – 8-hour standard	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Unclassifiable/Attainment	Unclassifiable/Attainment
Lead ¹	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
 "--" = The national 1-hour O₃ standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The Project site is located within the Source Receptor Area (SRA) 34. Within SRA 34, the SCAQMD Central San Bernardino Valley 2 monitoring station is located 6.58 miles northeast of the Project site and is the nearest long-term air quality monitoring site for O₃, CO, NO₂, PM₁₀, and PM_{2.5}. 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 2017 was obtained from the SCAQMD Air Quality Data Tables (12). Additionally, data for SO₂ has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO₂ concentrations.

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

TABLE 2-3: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2015-2017

POLLUTANT	STANDARD	YEAR		
		2015	2016	2017
Ozone				
Maximum Federal 1-Hour Concentration (ppm)		0.134	0.158	0.158
Maximum Federal 8-Hour Concentration (ppm)		0.117	0.1128	0.136
Number of Days Exceeding Federal 1-Hour Standard	>0.07 ppm	6	10	14
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	52	70	81
Number of Days Exceeding Federal 8-Hour Standard	> 0.070 ppm	78	106	112
Number of Days Exceeding State 8-Hour Standard	> 0.070 ppm	79	108	114
Carbon Monoxide (CO)				
Maximum Federal 1-Hour Concentration	> 35 ppm	2.3	2.2	2.5
Maximum Federal 8-Hour Concentration	> 20 ppm	1.2	1.7	2.3
Nitrogen Dioxide (NO ₂)				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.071	0.061	0.066
Annual Federal Standard Design Value		15.2	16.6	15.9
Particulate Matter ≤ 10 Microns (PM ₁₀)				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 150 µg/m ³	53.5	32.5	38.2
Annual Federal Arithmetic Mean (µg/m ³)		10.7	10.8	11.4
Number of Days Exceeding Federal 24-Hour Standard	> 150 µg/m ³	2	0	1
Number of Days Exceeding State 24-Hour Standard	> 50 µg/m ³	--	--	--
Particulate Matter ≤ 2.5 Microns (PM _{2.5})				
Maximum Federal 24-Hour Concentration (µg/m ³)	> 35 µg/m ³	78.0	91.0	86.0
Annual Federal Arithmetic Mean (µg/m ³)	> 12 µg/m ³	30.7	33.1	30.9
Number of Days Exceeding Federal 24-Hour Standard	> 35 µg/m ³	17	33	35

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

-- = data not available

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 (13). 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 (14). 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 O_3 , NO_2 , SO_2 , PM_{10} , CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 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 , NO_2 , NO_3) 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 (15) (13).

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 California Energy Commission (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 (16).

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 square feet or buildings projected to consume more than 1,000 gallons per day (5.303.1).
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas (5.304.3).
- Materials pollution control. Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard (5.404).
- Building commissioning. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies (5.410.2).

2.8.3 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 (17). 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.

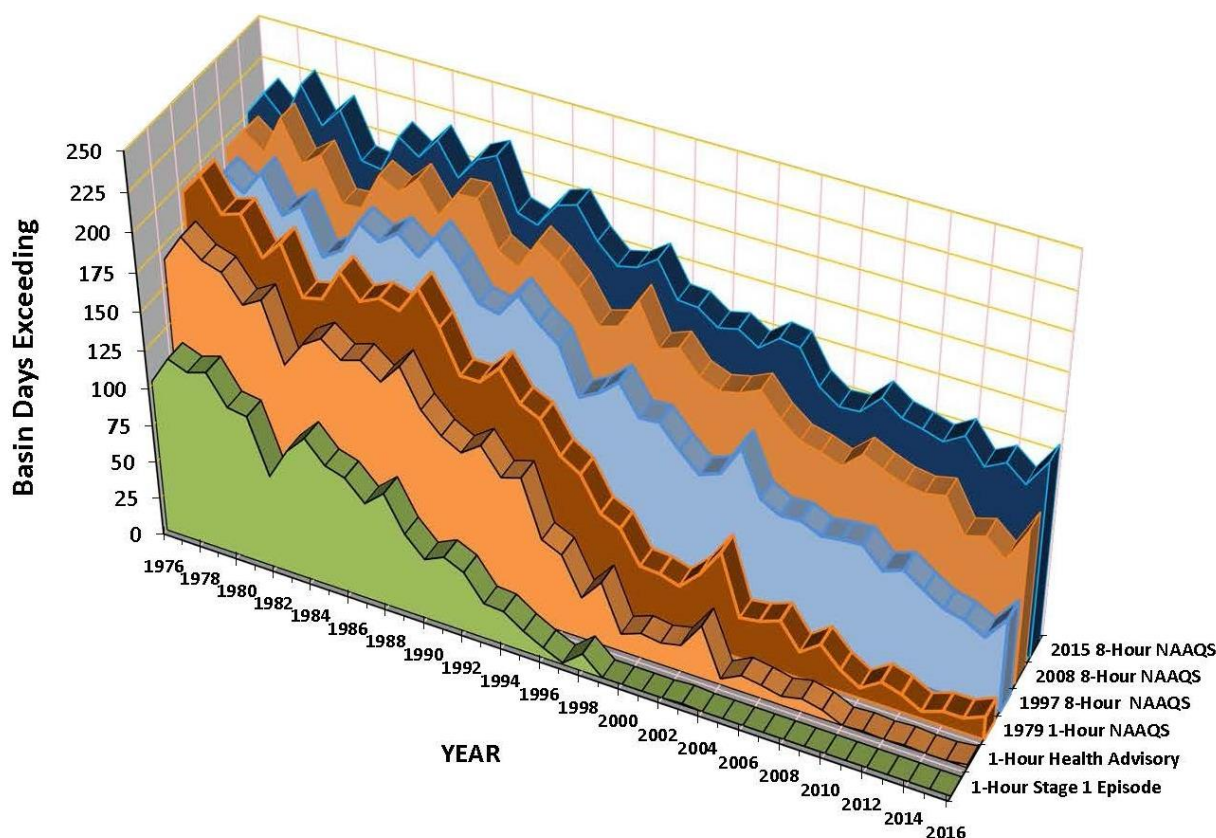
SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in Basin air quality. Nearly all control programs developed through the early 1990s relied on (i) the development and application of cleaner technology; (ii) add-on emission controls, and (iii) uniform CEQA review throughout 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,” (18).

Ozone, NO_x, VOC, and CO have been decreasing in the Basin since 1975 and are projected to continue to decrease through 2020 (19). 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 (20). Today, the maximum measured concentrations are approximately one-third of concentrations within the late 70’s.

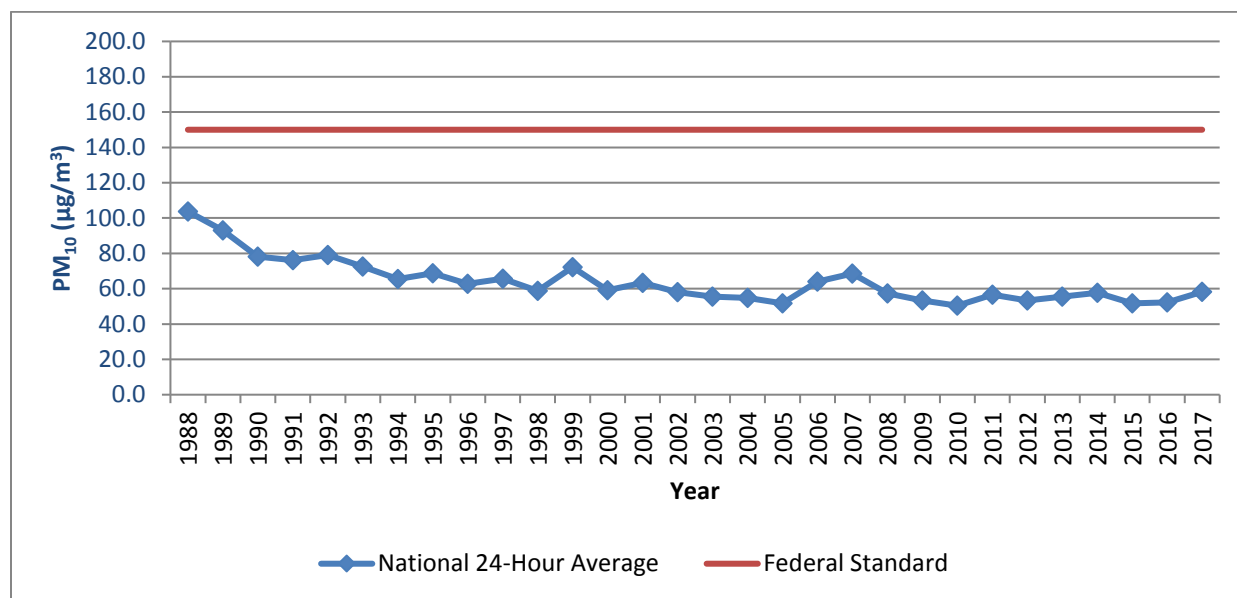
The overall trends of PM₁₀ and PM_{2.5} levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM₁₀ have remained somewhat constant in the Basin and direct emissions of PM_{2.5} have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust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

TABLE 2-4: SCAB OZONE TREND

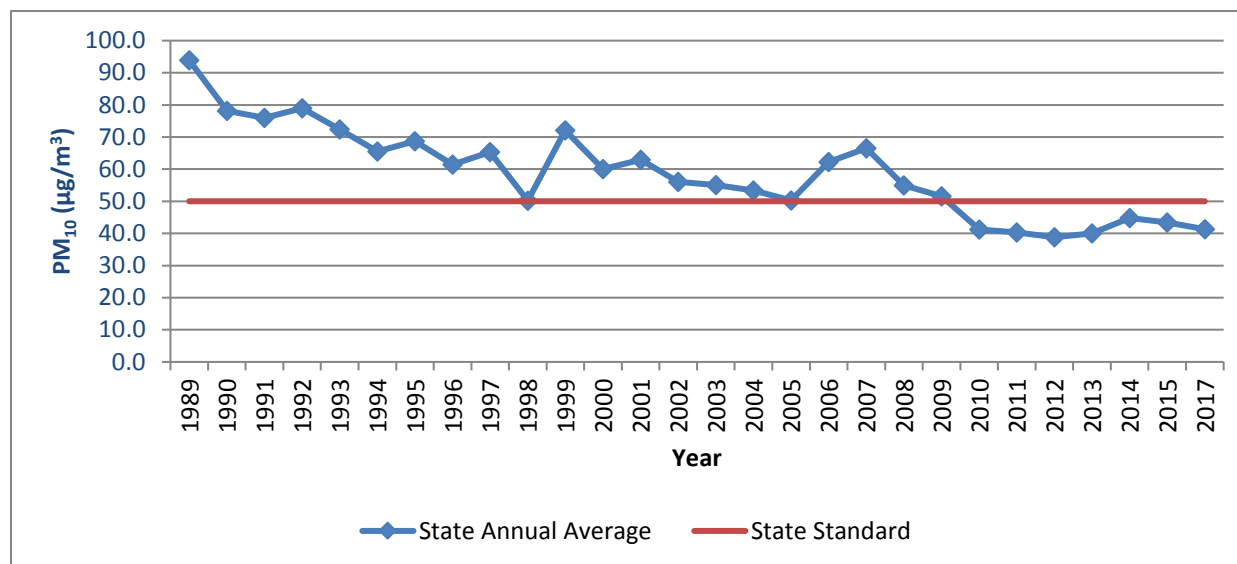


Source: Air Quality Management District

As with other pollutants, the most recent PM_{10} 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 PM_{10} 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 (21). 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 PM_{10} , have decreased by approximately 56 percent since 1988 (21). 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 PM_{10} standards has also shown an overall drop.

TABLE 2-5: SCAB AVERAGE 24-HOUR CONCENTRATION PM₁₀ TREND (BASED ON FEDERAL STANDARD)¹

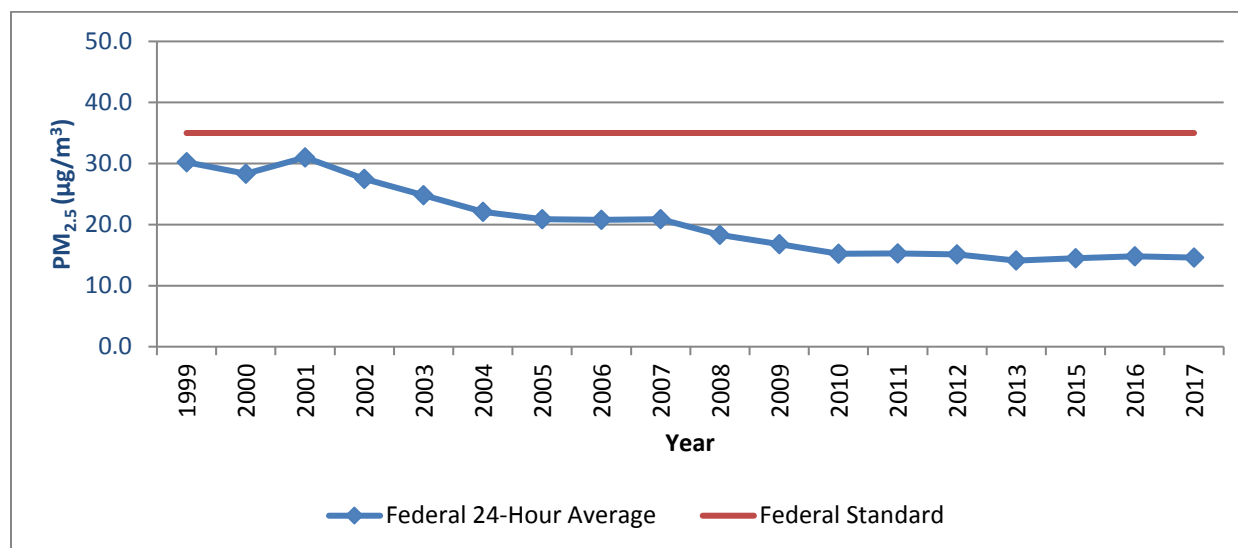
Source: California Air Resource Board

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 ANNUAL AVERAGE CONCENTRATION PM₁₀ TREND (BASED ON STATE STANDARD)¹**

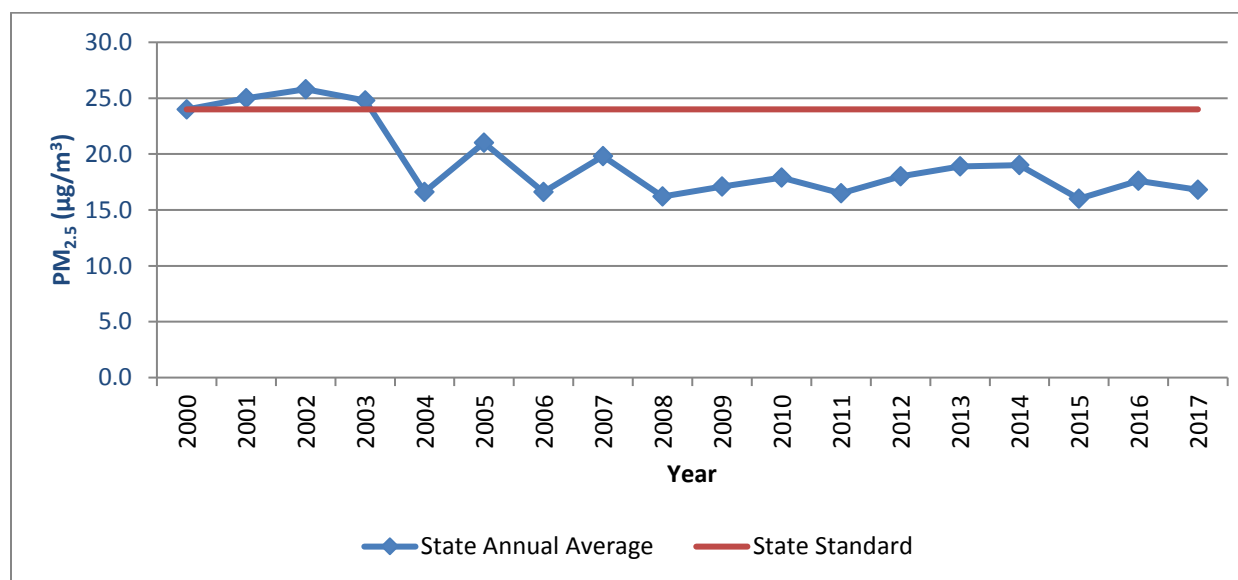
Source: California Air Resource Board

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 (21). The SCAB is currently designated as nonattainment for the State and federal PM_{2.5} standards.

TABLE 2-7: SCAB 24-HOUR AVERAGE CONCENTRATION PM_{2.5} TREND (BASED ON FEDERAL STANDARD)¹

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 ANNUAL AVERAGE CONCENTRATION PM_{2.5} TREND (BASED ON STATE STANDARD)¹**

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}.

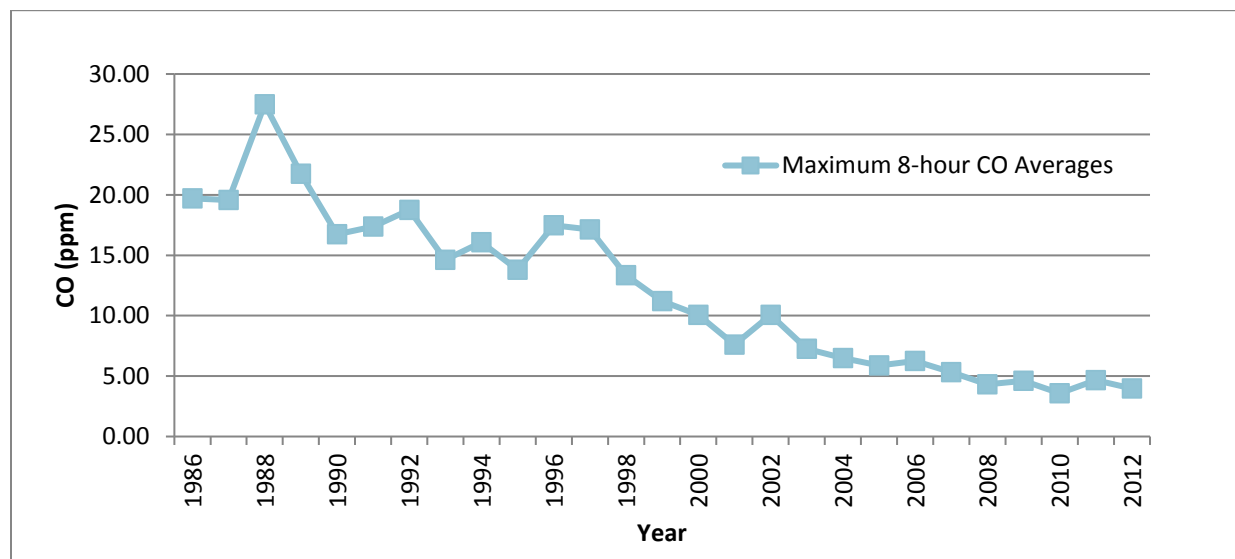
The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of PM_{2.5}-equivalent emission reductions continued through 2015, the severe drought conditions contributed to the PM_{2.5} increases observed after 2012. As a result of the disrupted progress 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 (22). 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 (17).

The most recent CO concentrations in the SCAB are shown in Tables 2-9 (21). CO concentrations in the SCAB have decreased markedly — a total decrease of more 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 South Coast Air Basin. 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 24-HOUR AVERAGE CONCENTRATION CO TREND¹



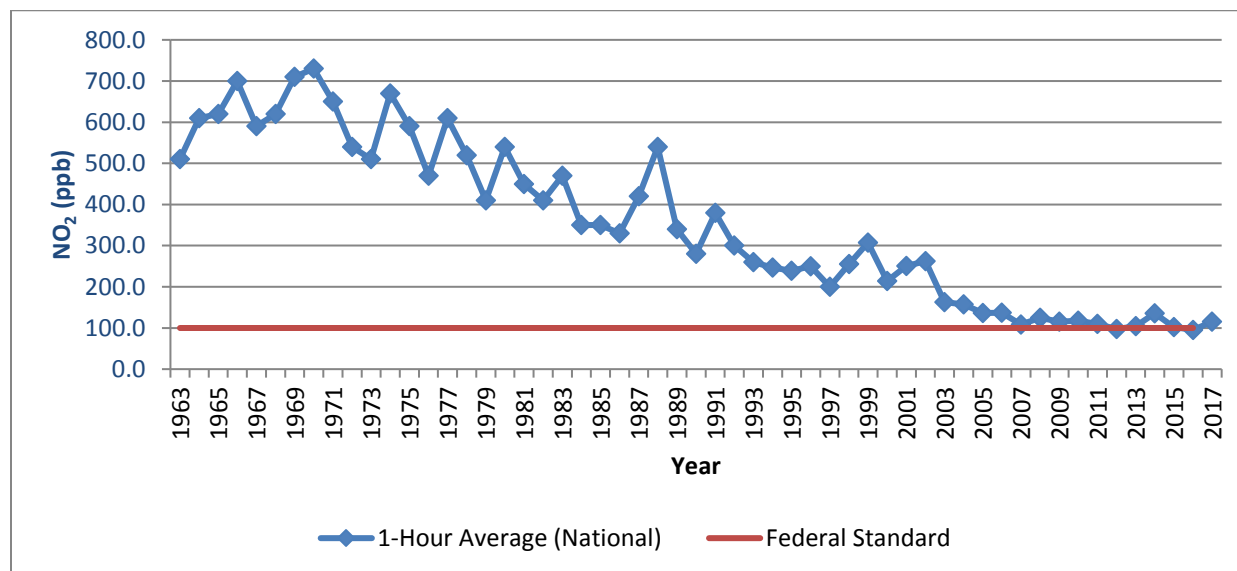
Source: California Air Resource Board

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

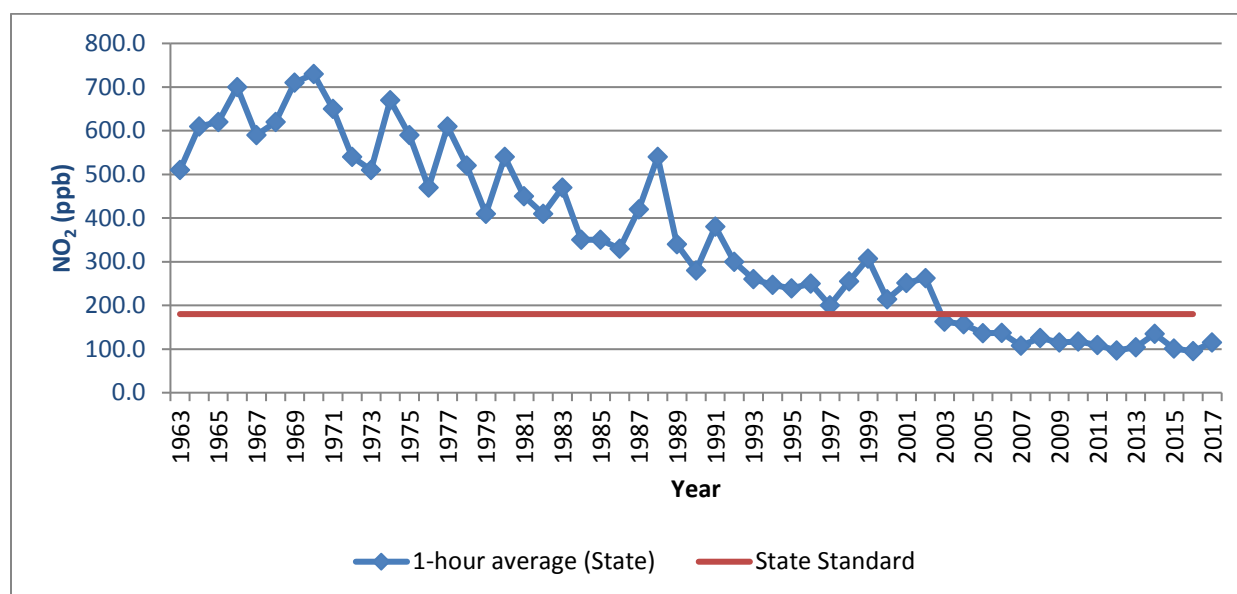
Part of the control process of the SCAQMD's duty to greatly improve the air quality in the Basin is the uniform CEQA review procedures required by SCAQMD's CEQA Handbook (23). The single threshold of significance used to assess Project direct and cumulative impacts has in fact "worked" as evidenced by 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 2-10 and 2-11 (21). 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 (24). 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.

TABLE 2-10: SCAB 1-HOUR AVERAGE CONCENTRATION NO₂ TREND (BASED ON FEDERAL STANDARD)



Source: California Air Resource Board

TABLE 2-11: SCAB 1-HOUR AVERAGE CONCENTRATION NO₂ TREND (BASED ON STATE STANDARD)

Source: California Air Resource Board

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 (25). 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 230 days in the initial 2000 State of the Air report (1996–1998) to 142 days in the 2017 report. The region has also seen dramatic reduction in particle pollution since the initial 2000 State of the Air report (25).

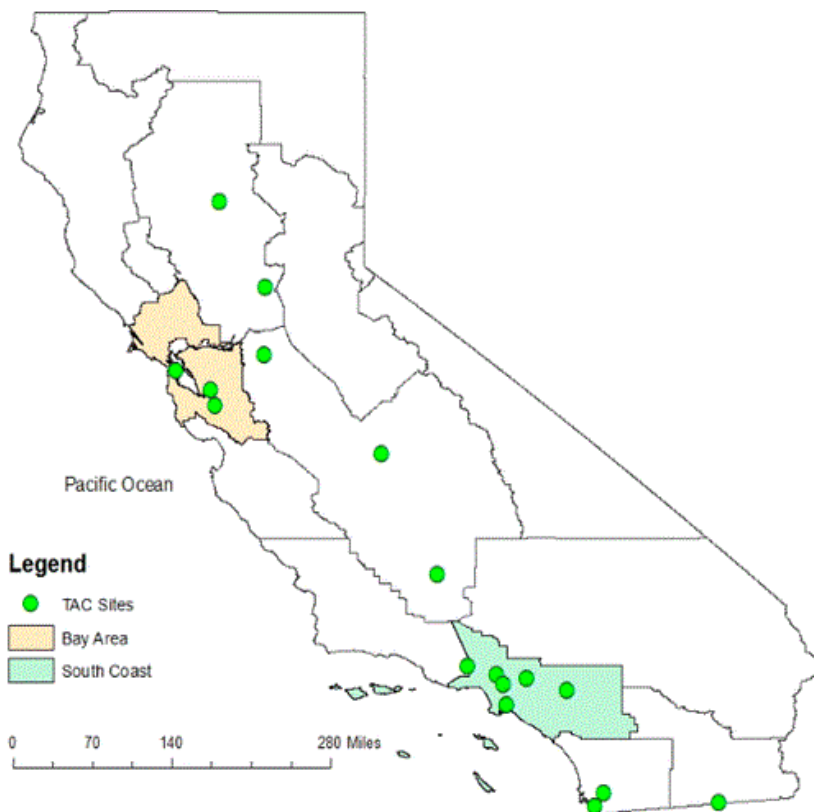
TOXIC AIR CONTAMINANTS (TACs) TRENDS

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 (26) 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

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.

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



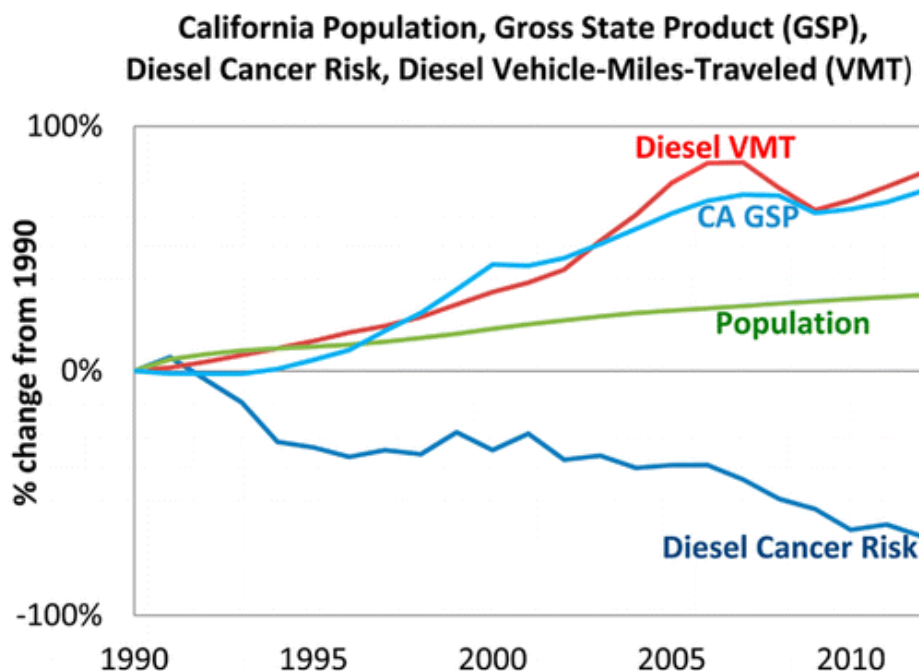
Source: California Air Resources Board

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 (26).

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 (POLA and POLB) 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 (27), the CARB statewide On-road Truck and Bus Regulation (28), and the Ports of Los Angeles and Long Beach "Clean Truck Program" (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet (29). 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.

In 2015, the SCAQMD published an in-depth analysis of the toxic air contaminants and the resulting health risks for all of Southern California. The *Multiple Air Toxics Exposure Study in the SCAB, MATES IV*, which shows that cancer risk has decreased less than 50% since MATES III (2005) (30).

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 771.83 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.

In January 2018, as part of the overall effort to reduce air toxics exposure in the SCAB, SCAQMD began conducting the MATES V Program. MATES V field measurements will be conducted over a one-year period at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V will also include measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV (31). The final report for the MATES V study will be available in Fall 2019.

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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 criteria used to determine the significance of potential Project-related air quality impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (32):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has also developed regional and localized significance thresholds for other regulated pollutants, as summarized at Table 3-1 (33). 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.

TABLE 3-1: MAXIMUM DAILY 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

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 (34). CalEEMod utilizes widely accepted models for emissions estimates combined with default data that can be used if site-specific information is not available. It should be noted that a majority of the default data associated with locations and land use is based on surveys of existing land uses. Caution should be taken if the project deviates significantly from the types and features included in the survey that forms the evidence supporting the default data (35). 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 3.4.

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 October 2019 and will last through September 2020. Construction duration by phase is shown on Table 3-2. The construction schedule utilized in the analysis 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 The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity was based on a 2020 opening year. The associated construction equipment was generally

³ As shown in the California Emissions Estimator Model (CalEEMod) User’s Guide Version 2016.3.2, Section 4.3 “OFFROAD Equipment” 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.

based on CalEEMod 2016.3.2 defaults. Please refer to specific detailed modeling inputs/outputs contained in Appendix 3.2 of this analysis. A detailed summary of construction equipment assumptions by phase is provided at Table 3-3.

TABLE 3-2: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	10/17/2019	11/13/2019	20
Site Preparation	11/14/2019	11/27/2019	10
Grading	11/28/2019	01/08/2020	30
Building Construction	01/09/2020	08/05/2020	150
Paving	08/06/2020	09/02/2020	20
Architectural Coating	07/20/2020	09/25/2020	50

TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity	Equipment	Amount	Hours Per Day
Demolition	Concrete/Industrial Saws	1	8
	Excavators	3	8
	Rubber Tired Dozers	2	8
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Graders	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Crawler Tractors	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 and would require the demolition of 3,076 square feet of existing building structures.

Based on consultation with the Project applicant, the Project site is expected to balance (will not require soil import/export). 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.

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 from the applicant and the CalEEMod model.

3.4.1 CONSTRUCTION EMISSIONS SUMMARY

Impacts without Mitigation

The SCAQMD Rules that are currently applicable during construction activity for this Project include Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3). As such, credit for Rule 403 and Rule 1113 have been taken in the air quality modeling herein.

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-4. 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 of any criteria pollutants.

TABLE 3-4: EMISSIONS SUMMARY OF CONSTRUCTION (WITHOUT MITIGATION)

Year	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2019	5.95	68.27	34.75	0.07	11.05	6.75
2020	29.26	60.96	33.14	0.08	6.49	3.78
Maximum Daily Emissions	29.26	68.27	34.75	0.08	11.05	6.75
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

Impacts with Mitigation

Although mitigation is not needed to reduce estimated maximum daily construction regional emissions, mitigation measures would be required to decrease localized emissions (please refer to the subsequent discussions at “Localized Significance”). As shown in Table 3-5, although already below the threshold, emissions in CO have increased slightly. It should be noted that this increase is a function of how CalEEMod calculates emissions after Tier 3 mitigation is implemented. Notwithstanding, a less than significant impact would occur and implementation of these localized emissions mitigation measures would further reduce already less-than-

significant regional emissions. Detailed construction model outputs are presented in Appendix 3.2.

TABLE 3-5: EMISSIONS SUMMARY OF CONSTRUCTION (WITH MITIGATION)

Year	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2019	4.78	58.15	36.28	0.07	10.11	5.93
2020	28.76	54.04	34.82	0.08	6.17	3.50
Maximum Daily Emissions	28.76	58.15	36.28	0.08	10.11	5.93
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 buildings that are 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-related operational air quality impacts derive predominantly from mobile sources. In this regard, over 86 percent (by weight) of all Project operational-source emissions would be generated by mobile sources (vehicles). Neither the Project Applicant nor the County has any regulatory control over these tail pipe emissions. Rather, vehicle tail pipe source emissions are regulated by CARB and USEPA. As summarized previously herein, as the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve.

The Project-related operational air quality impacts derive primarily from vehicle trips generated by the Project. Trip characteristics available from the report, *Slover and Cactus Warehouse Traffic Impact Analysis* (Urban Crossroads, Inc. 2019) were utilized in this analysis (5).

Per the TIA, the Project is expected to generate a net total of approximately 449 trip-ends per day (actual vehicles) (5) for the warehouse use. The net Project trip generation includes 90 truck trip-ends per day from the proposed buildings within the Project site including 16.67% 2-axle trucks, 20.69% 3-axle trucks, and 62.64% 4+-axle trucks.

3.5.3.1 Trip Length

Background

A technical deficiency inherent in calculating the projected vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips to/from the Project are multiplied by the average trip length (36). This method of estimating VMT for use in calculating vehicle emissions likely results in the over-estimation and double-counting of emissions because, for a distribution warehouse center such as the Project, the land use is likely to attract (divert) existing vehicle trips that are already on the circulation system as opposed to generating new trips. In this regard, the Project would, to a large extent, redistribute existing mobile-source emissions rather than generate additional emissions within the Basin. As such, the estimation of the Slover and Cactus Warehouse Project's vehicular-source emissions are likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Provided below is a summary of the VMT recommendations of the SCAQMD and Southern California Association of Governments (SCAG), followed by a description of the methodology used to calculate the VMT rates used in this AQIA.

SCAQMD Recommendation

In the last five years, the SCAQMD has provided numerous comments on the trip length for warehouse/distribution and industrial land use projects. The SCAQMD asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. It should be noted that for warehouse, distribution center, and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the POLA and POLB and/or to destinations outside of California. The SCAQMD states that for this reason, the CalEEMod™ and the URBEMIS model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length (37).

SCAG Heavy Duty Truck Model

SCAG is comprised of six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in Southern California, and is the organization charged with addressing and resolving short- and long-term regional policy issues. The SCAG region also consists of 14 sub-regional entities recognized by the Regional Council as partners in the regional policy planning process. The SCAG region has more than 19 million residents and encompasses more than 38,000 square miles, representing the largest and most diverse region in the country (38).

SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks. As such, a weighted average trip length of 18.52 miles was input in CalEEMod.

Approach for Analysis of the Project

The SCAQMD approach identified above is deemed to be the most applicable for the Project. This same methodology is employed in analyses for similar projects in the County and is considered by the Lead Agency to be appropriate and accurate.

Two separate model runs were utilized in order to more accurately model emissions resulting from vehicle operations. The first run analyzed passenger car emissions, which incorporated a default trip length of 16.6 miles for passenger cars within San Bernardino County and a fleet mix of 100% Light-Duty-Auto vehicles (LDA). The second run analyzed truck emissions, which incorporated an average truck trip length of 40 miles and a fleet mix of: 16.7% of Light-Heavy-Duty (LHD), 20.7% of Medium-Heavy-Duty (MHD), and 62.6% of Heavy-Heavy-Duty (HHD) for warehousing uses. This proportional truck mix by axle type is based on information provided in the Project's traffic study. The estimated emissions resulting from vehicle operations are summarized in Section 3.5.4 (presented later in this report.) Detailed emission calculations are provided in Appendix 3.3 and 3.4.

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 break and tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod model (35).

3.5.4 OPERATIONAL EMISSIONS SUMMARY

Operational-source emissions are summarized on Table 3-6. Project operational-source emissions would not exceed the applicable SCAQMD thresholds for any criteria pollutant. Thus, a less than significant impact would occur for Project operational-source emissions and no mitigation is required.

TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	5.83	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.02	0.14	0.12	8.40E-04	0.01	0.01
Mobile (Passenger Cars)	0.56	0.80	11.59	0.04	4.55	1.22
Mobile (Trucks)	0.87	27.30	6.37	0.10	3.37	1.07
Total Maximum Daily Emissions	7.27	28.25	18.14	0.14	7.94	2.30
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	5.83	5.70E-04	0.06	0.00	2.20E-04	2.20E-04
Energy Source	0.02	0.14	0.12	8.40E-04	0.01	0.01
Mobile (Passenger Cars)	0.46	0.84	9.33	0.04	4.55	1.22
Mobile (Trucks)	0.89	27.99	6.64	0.10	3.37	1.07
Total Maximum Daily Emissions	7.18	28.97	16.15	0.14	7.94	2.30
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) (39). 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 (39).

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) (39).

APPLICABILITY OF LSTs FOR THE PROJECT

For this Project, the appropriate Source Receptor Area (SRA) for the LST analysis is the Perris Valley monitoring station (SRA 24). 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:

- The CalEEMod model is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The equipment specific grading rates listed in Appendix A of the CalEEMod User's Guide 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 (35).
- 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 SCAQMD recommends that Projects exceeding the screening look-up tables undergo dispersion modeling to determine actual impacts). The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.

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 (40)." 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

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. Based on Table 3-7, the proposed Project could actively disturb approximately 1.0 acre per day during demolition, 3.5 acres per day for the site preparation activities, and 4.0 acres per day for the grading activities. The acres disturbed is based on the equipment list and days in for demolition, site preparation, and grading according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday (as shown on Table 3-7). The equipment-specific grading rates are summarized in the CalEEMod user’s guide, *Appendix A: Calculation Details for CalEEMod* (October 2017).

TABLE 3-7: MAXIMUM DAILY DISTURBED-ACREAGE

Construction Activity	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	1.0
Total acres disturbed per day during Demolition					1.0
Site Preparation	Crawler Tractors	4	0.5	8	2
	Rubber Tired Dozers	3	0.5	8	1.5
Total acres disturbed per day during Site Preparation					3.5
Grading	Crawler Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	2	0.5	8	2.0
Total acres disturbed per day during Grading					4.0

Sensitive Receptors

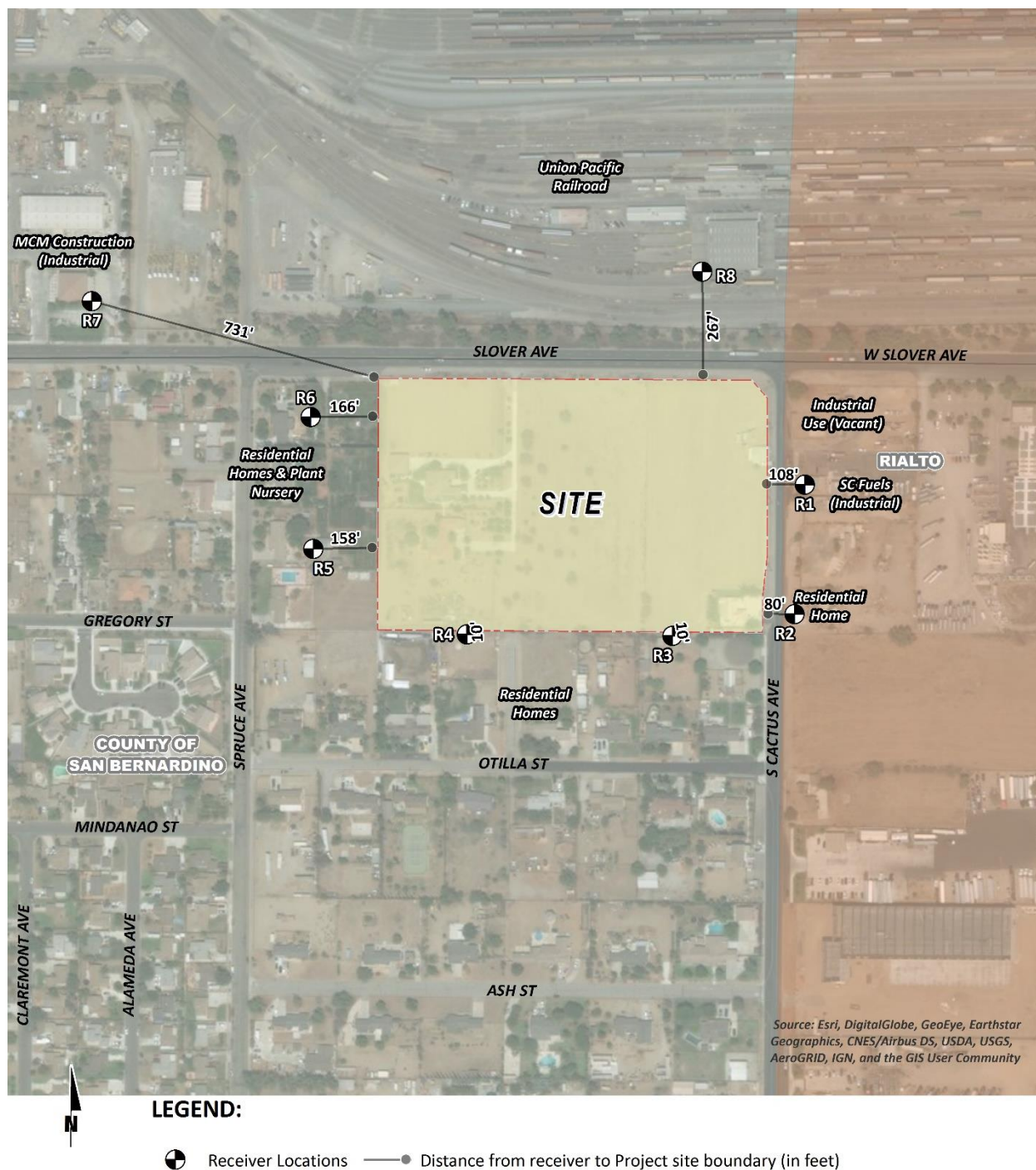
Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in 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. The nearest sensitive receptor is a residential home located 80 feet/ 24.38 meters east of the Project Site. Other sensitive receptors near the Project site include existing residential homes, industrial uses, and outdoor living area and stable uses, as described below.

- R1: Located approximately 108 feet east of the Project site, R1 represents existing industrial uses across Cactus Avenue.

- R2: Location R2 represents the existing residential home located approximately 80 feet east of the Project site across Cactus Avenue.
- R3: Location R3 represents the outdoor living area and stables in the backyards of residential homes located roughly 10 feet south of the Project site.
- R4: Location R4 represents the outdoor living area and stables in the backyards of residential homes located roughly 10 feet south of the Project site.
- R5: Location R5 represents the existing residential home and nursery located roughly 158 feet west of the Project site on Spruce Avenue.
- R6: Location R6 represents the existing residential home and nursery located roughly 166 feet west of the Project site on Spruce Avenue.
- R7: Location R7 represents the existing industrial use northwest of the Project site at roughly 731 feet.
- R8: Location R8 represents the existing Union Pacific railroad yard roughly 267 feet north of the Project site.

As previously stated, the nearest sensitive receptor is located roughly 80 feet/ 14.90 meters east 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 (41)."* Consistent with the SCAQMD's Final LST Methodology, a 25-meter receptor distance is utilized in this analysis and provide for a conservative i.e. "health protective" standard of care.

EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS



LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

Since the total acreage disturbed is less than five acres per day for 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 38-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	667 lbs/day (Demolition)	1,746 lbs/day
	1,359 lbs/day (Site Preparation)	
	1,488 lbs/day (Grading)	
PM ₁₀	4 lbs/day (Demolition)	4 lbs/day
	11 lbs/day (Site Preparation)	
	12 lbs/day (Grading)	
PM _{2.5}	3 lbs/day (Demolition)	2 lbs/day
	6 lbs/day (Site Preparation)	
	7 lbs/day (Grading)	

CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS

Since the total acreage disturbed is less than five acres per day for both the site preparation phase and the grading phase, 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, consistent with SCAQMD guidance, in order to interpolate the threshold values for the other disturbed acreage not identified. As previously noted, a 25-meter receptor distance is utilized to determine the LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5}.

Impacts without Mitigation

The SCAQMD Rules that are currently applicable during construction activity for this Project include Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3). As such, credit for Rule 403 and Rule 1113 have been taken in the air quality modeling herein.

Table 3-9 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Without mitigation, localized construction emissions would exceed the applicable SCAQMD LSTs for emissions of 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 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	1.93	1.69
SCAQMD Localized Threshold	118	667	4	3
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	68.20	23.17	10.85	6.70
SCAQMD Localized Threshold	220	1,359	11	6
Threshold Exceeded?	NO	NO	NO	YES
On-Site Grading Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	65.83	33.93	6.47	3.91
SCAQMD Localized Threshold	237	1,488	12	7
Threshold Exceeded?	NO	NO	NO	NO

Impacts with Mitigation

Table 3-10 identifies the localized impacts at the nearest receptor location in the vicinity of the Project with implementation of MM AQ-1. After implementation of MM AQ-1, construction emissions would not exceed the applicable SCAQMD LSTs for any criteria pollutant. As shown in Table 3-10, although already below the threshold, emissions in CO have increased slightly. It should be noted that this increase is a function of how CalEEMod calculates emissions after Tier 3 mitigation is implemented. Notwithstanding, a less than significant impact would occur and no additional mitigation is required. Outputs from the model runs for mitigated construction LSTs are provided in Appendix 3.2.

TABLE 3-10: LOCALIZED SIGNIFICANCE SUMMARY CONSTRUCTION (WITH MITIGATION, 1 OF 2)

On-Site Demolition Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	35.78	22.06	1.93	1.69
SCAQMD Localized Threshold	118	667	4	3
Threshold Exceeded?	NO	NO	NO	NO

TABLE 3-10: LOCALIZED SIGNIFICANCE SUMMARY CONSTRUCTION (WITH MITIGATION, 2 OF 2)

On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	48.65	26.36	9.91	5.88
SCAQMD Localized Threshold	220	1,359	11	6
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	65.83	33.93	6.47	3.91
SCAQMD Localized Threshold	237	1,488	12	7
Threshold Exceeded?	NO	NO	NO	NO

3.7 LOCALIZED SIGNIFICANCE – LONG-TERM OPERATIONAL ACTIVITY

The Project is located on a 13.27-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 3-11 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 3-11 represent all on-site Project-related stationary (area) sources and five percent (5%) of the Project-related mobile sources. Considering that the weighted trip length used in CalEEMod™ for the Project is approximately 40 miles for trucks and passenger cars, 5% of this total would represent an on-site travel distance of approximately 2.0 mile/ 10,560 feet for each vehicle. Thus the 5% assumption is conservative and would tend to overstate the actual impact. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

OPERATIONAL-SOURCE EMISSIONS LST ANALYSIS

Impacts without Mitigation

As shown on Table 3-11, 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 3-11: LOCALIZED SIGNIFICANCE OPERATIONS SUMMARY

Operational Activity	Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	1.55	1.08	0.41	0.13
SCAQMD Localized Threshold	270	1,746	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 (42).

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 2-3.

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 3-12.

TABLE 3-12: CO MODEL RESULTS

Intersection Location	Carbon Monoxide Concentrations (parts per million)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire-Veteran	4.6	3.5	3.7
Sunset-Highland	4	4.5	3.5
La Cienega-Century	3.7	3.1	5.2
Long Beach-Imperial	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations

Notes: 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 (43). 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 (44).

Traffic volumes generating the CO concentrations for the “hot spot” analysis is shown on Table 3-13. The busiest intersection evaluated for AM traffic volumes was at Wilshire Blvd. and Veteran Ave., which has an AM traffic volume of approximately 8,062 vehicles per hour. Alternatively, the busiest intersection for PM traffic volumes was at La Cienega Boulevard and Century Boulevard, which has a PM traffic volume of 8,674 vehicles per hour (43). 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 As shown in Exhibit 7-2 of the TIA, the highest trips on a segment of road for the Project is 58,900 vehicles per hour on Cedar Avenue and I-10 Westbound Ramps (5). Additionally, the 2003 AQMP determined that the highest traffic volumes on a segment of road is 8,674 vehicles per hour on

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

La Cienega Boulevard and Century Boulevard (43). As shown on Table 3-14, the highest trips on a segment of road for the Project is 5,666 vehicles per hour on Cedar Avenue and I-10 Westbound Ramps. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. 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 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 3-13: TRAFFIC VOLUMES

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

Source: 2003 AQMP

TABLE 3-14: PROJECT PEAK HOUR TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Cedar Av. & I-10 Westbound Ramps	1,954/2,393	2,754/2,193	0/0	957/940	5,666/5,525
Cedar Av. & I-10 Eastbound Ramps	2,086/2,140	2,299/1,943	1,110/1,363	0/0	5,495/5,445
Cedar Av. & Orange St.	1,679/1,652	2,283/1,782	397/308	123/351	4,481/4,092
Cedar Av. & Slover Av.	1,313/1,270	1,605/1,498	476/999	448/707	3,842/4,474

Source: Slover and Cactus Warehouse Traffic Impact Analysis (Urban Crossroads, Inc., 2018).

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 (45). 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 (46). 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) (47). 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

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized significance thresholds (LSTs) or regional significance thresholds were exceeded. The Project would not exceed the applicable LST thresholds or regional significance thresholds for construction activity (after mitigation). Therefore, the Project would not conflict with the AQMP according to this criterion.

Operational Impacts

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

On the basis of the preceding discussion, the Project is 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 County of San Bernardino 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

The BL/RS-1-AA (Residential/Additional Agriculture) designation provides for single family housing on one-acre lots, with agricultural and animal raising activities, and public facilities. According to the adopted Bloomington Community Plan, the primary land use goal for the area which includes the Project site is that the rural character of this area be preserved through the Additional Agriculture Overlay and rural standards for development (San Bernardino County 2007 adopted General Plan and Development Code). The Project consist of the development of 257,855 SF of single warehouse use on an approximately 13.27-acre site. The proposed use is inconsistent with the residential designation and lot sizing and would not protect the existing rural character of the area as such, the Project would require a zoning change. However, since the Project construction and operational LSTs do not exceed the thresholds of significance, the Project would not cause an exceedance of an air quality violation and is therefore considered consistent with this criterion.

AQMP Consistency Conclusion

The Project would not result in or cause NAAQS or CAAQS violations. Although the Project would not be consistent with the site land use and zoning designations, construction and operational-source impacts would not exceed the applicable SCAQMD regional and localized thresholds. As such, the Project would not have a significant impact with respect to 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.

The proposed Project would not result in a CO "hotspot" as a result of Project related traffic during ongoing operations, nor would the Project result in a significant adverse health impact as discussed in Section 3.9. Thus a less than significant impact to sensitive receptors during operational activity is expected.

TOXIC AIR POLLUTANTS FROM PROJECT CONSTRUCTION ACTIVITIES

During short-term construction activity, the Project will also result in some diesel particulate matter (DPM) which is a listed carcinogen and toxic air contaminant (TAC) in the State of California. The 2015 Office of Environmental Health Hazard Assessment (OEHHA) revised risk assessment guidelines suggest that construction projects as short as 2-6 months may warrant evaluation. Notwithstanding, based on Urban Crossroad's professional opinion and experience

in preparing health risk assessments for development projects, given the size of the Project and the relatively small amount of equipment and relative short duration of activity, any DPM generated from construction activity would be negligible and not result in any significant health risks and no further evaluation is required.

Furthermore, the SCAQMD has acknowledged that they are currently evaluating the applicability of age sensitivity factors and have not established CEQA guidance. More specifically in their response to comments received on SCAQMD Rules 1401 in June 2015 (see Board Meeting June 5, 2015), the SCAQMD explicitly states that (Page A-7 and A-8):

“The Proposed Amended Rules are separate from the CEQA significance thresholds. The SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board. In the interim, staff will continue to use the previous guidelines for CEQA determinations.”

3.11 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 industrial refuse. Consistent with County requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, thereby precluding substantial generation of odors due to temporary holding of refuse on-site. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (48).

3.12 CUMULATIVE IMPACTS

Related projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM₁₀, and PM_{2.5}.

The SCAQMD relies on the SCAQMD guidance for determining cumulative impacts. The SCAQMD has recognized that there is typically insufficient information to quantitatively evaluate the cumulative contributions of multiple projects because each project applicant has no control over nearby projects.

Related projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM₁₀, and PM_{2.5}.

The SCAQMD 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* (49). 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 CONCLUSION

CONSTRUCTION-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project would not exceed the numerical thresholds of significance established by the South Coast Air Quality Management District (SCAQMD) for emissions of any criteria pollutant. Although mitigation is not needed to reduce estimated maximum daily construction regional emissions, mitigation measures would be required to decrease localized emissions (please refer to the subsequent discussions at “Localized Significance”). Implementation of these localized emissions mitigation measures would further reduce already less-than-significant regional emissions.

LOCALIZED IMPACTS

For localized emissions, the Project would exceed the SCAQMD’s localized significance threshold for emissions of PM_{2.5} during site preparation activities. After implementation of MM AQ-1, localized construction emissions would not exceed the applicable SCAQMD LSTs for any criteria pollutant. Therefore, a less than significant impact would occur.

Project construction-source emissions would not conflict with the applicable AQMP.

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 thresholds of significance established by the SCAQMD for any criteria pollutant. Thus, a less than significant impact would occur for Project-related operational-source emissions and no mitigation is 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.

Project operational-source emissions would not conflict with the applicable AQMP.

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 (50). Consistent with County 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 Slover and Cactus 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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Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

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PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
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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

APPENDIX C

MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

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APPENDIX C

MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

Ambient Air Quality Standards

(Updated 5/4/16)

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/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		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/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, 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 CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

FIGURE 1

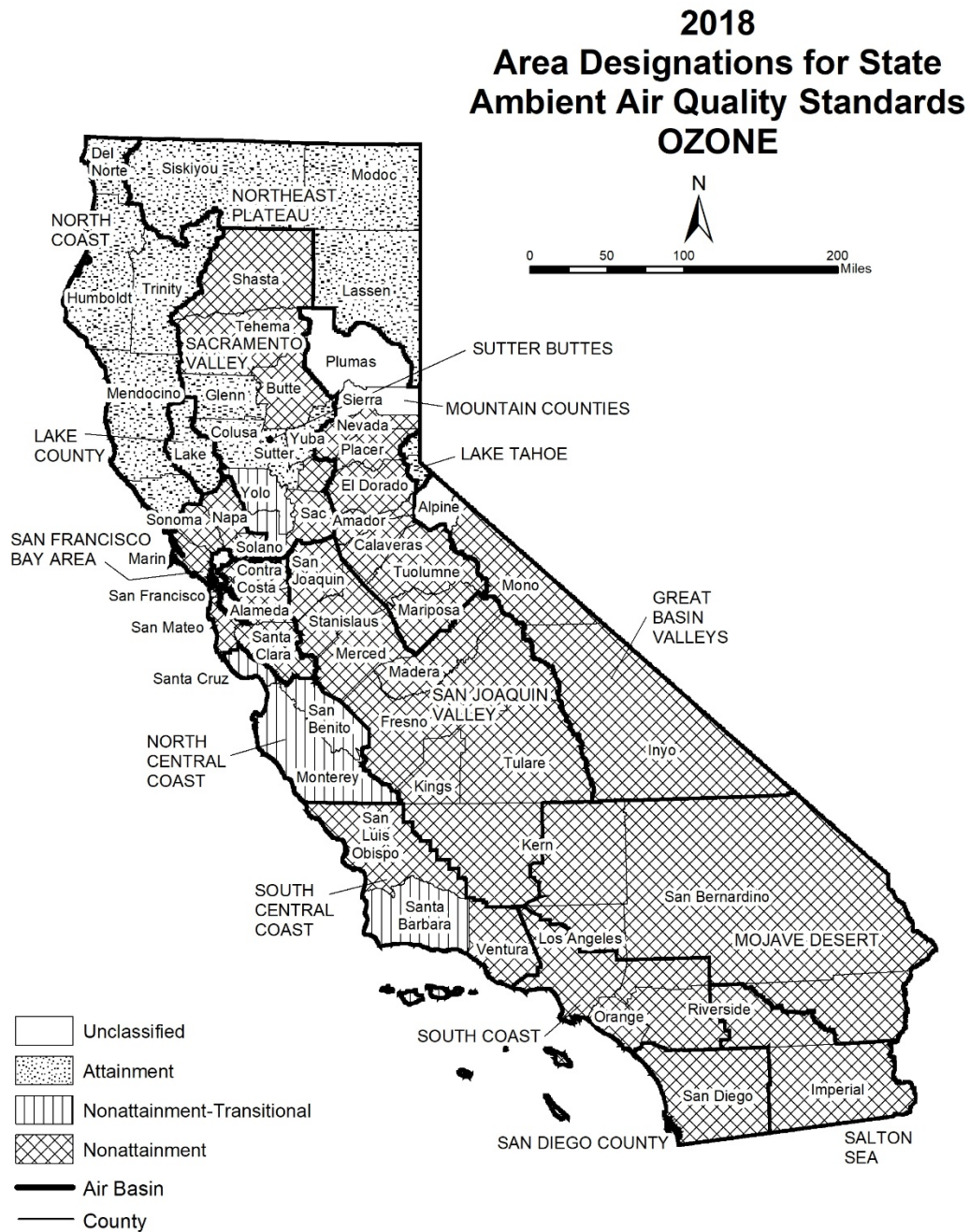


TABLE 1

**California Ambient Air Quality Standards
Area Designations for Ozone ⁽¹⁾**

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTHEAST PLATEAU AIR BASIN				X
Alpine County			X		SACRAMENTO VALLEY AIR BASIN				
Inyo County	X				Colusa and Glenn Counties				X
Mono County	X				Sutter/Yuba Counties				
LAKE COUNTY AIR BASIN				X	Sutter Buttes	X			
LAKE TAHOE AIR BASIN				X	Remainder of Sutter County				X
MOJAVE DESERT AIR BASIN	X				Yuba County				X
MOUNTAIN COUNTIES AIR BASIN					Yolo/Solano Counties		X		
Amador County	X				Remainder of Air Basin	X			
Calaveras County	X				SALTON SEA AIR BASIN	X			
El Dorado County (portion)	X				SAN DIEGO AIR BASIN	X			
Mariposa County	X				SAN FRANCISCO BAY AREA AIR BASIN	X			
Nevada County	X				SAN JOAQUIN VALLEY AIR BASIN	X			
Placer County (portion)	X				SOUTH CENTRAL COAST AIR BASIN				
Plumas County			X		San Luis Obispo County	X			
Sierra County			X		Santa Barbara County		X		
Tuolumne County	X				Ventura County	X			
NORTH CENTRAL COAST AIR BASIN		X			SOUTH COAST AIR BASIN	X			
NORTH COAST AIR BASIN				X					

(1) AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

**2018
Area Designations for State
Ambient Air Quality Standards
PM₁₀**

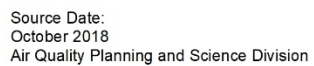


TABLE 2

**California Ambient Air Quality Standards
Area Designation for Suspended Particulate Matter (PM10)**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN	X			NORTH CENTRAL COAST AIR BASIN	X		
LAKE COUNTY AIR BASIN			X	NORTH COAST AIR BASIN			
LAKE TAHOE AIR BASIN	X			Del Norte, Sonoma (portion) and Trinity Counties			X
MOJAVE DESERT AIR BASIN	X			Remainder of Air Basin	X		
MOUNTAIN COUNTIES AIR BASIN				NORTHEAST PLATEAU AIR BASIN			
Amador County		X		Siskiyou County			X
Calaveras County	X			Remainder of Air Basin		X	
El Dorado County (portion)	X			SACRAMENTO VALLEY AIR BASIN			
Mariposa County				Shasta County			X
- Yosemite National Park	X			Remainder of Air Basin	X		
- Remainder of County		X		SALTON SEA AIR BASIN	X		
Nevada County	X			SAN DIEGO AIR BASIN	X		
Placer County (portion)	X			SAN FRANCISCO BAY AREA AIR BASIN	X		
Plumas County	X			SAN JOAQUIN VALLEY AIR BASIN	X		
Sierra County	X			SOUTH CENTRAL COAST AIR BASIN	X		
Tuolumne County		X		SOUTH COAST AIR BASIN	X		

FIGURE 3

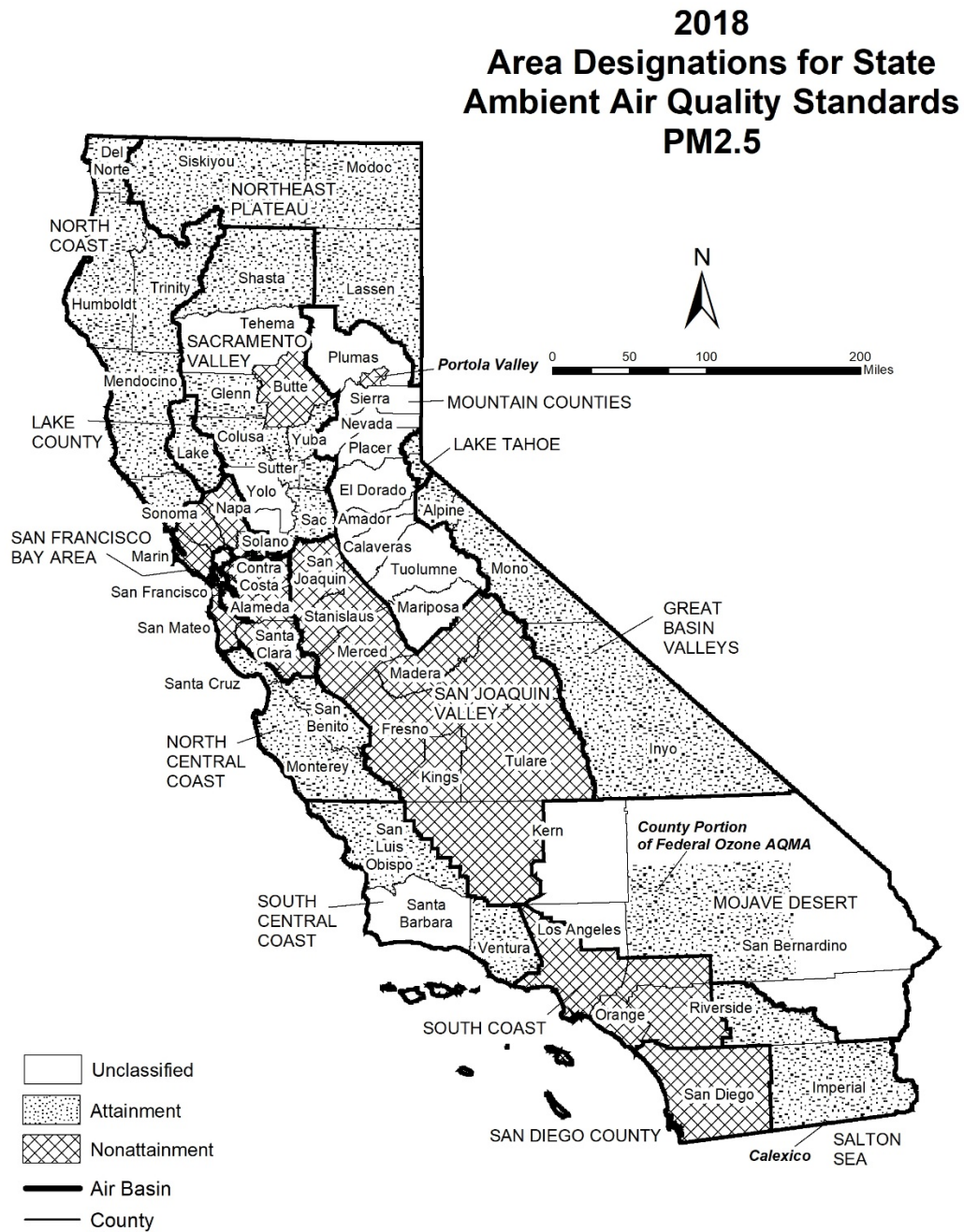


TABLE 3

**California Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			
LAKE COUNTY AIR BASIN			X	Imperial County			
LAKE TAHOE AIR BASIN			X	- City of Calexico (3)	X		
MOJAVE DESERT AIR BASIN				Remainder of Air Basin			X
San Bernardino County				SAN DIEGO AIR BASIN	X		
- County portion of federal Southeast Desert Modified AQMA for Ozone (1)			X	SAN FRANCISCO BAY AREA AIR BASIN	X		
				SAN JOAQUIN VALLEY AIR BASIN	X		
Remainder of Air Basin		X		SOUTH CENTRAL COAST AIR BASIN			
MOUNTAIN COUNTIES AIR BASIN				San Luis Obispo County			X
Plumas County				Santa Barbara County		X	
- Portola Valley (2)	X			Ventura County			X
Remainder of Air Basin		X		SOUTH COAST AIR BASIN	X		
NORTH CENTRAL COAST AIR BASIN			X				
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN							
Butte County	X						
Colusa County			X				
Glenn County			X				
Placer County (portion)			X				
Sacramento County			X				
Shasta County			X				
Sutter and Yuba Counties			X				
Remainder of Air Basin		X					

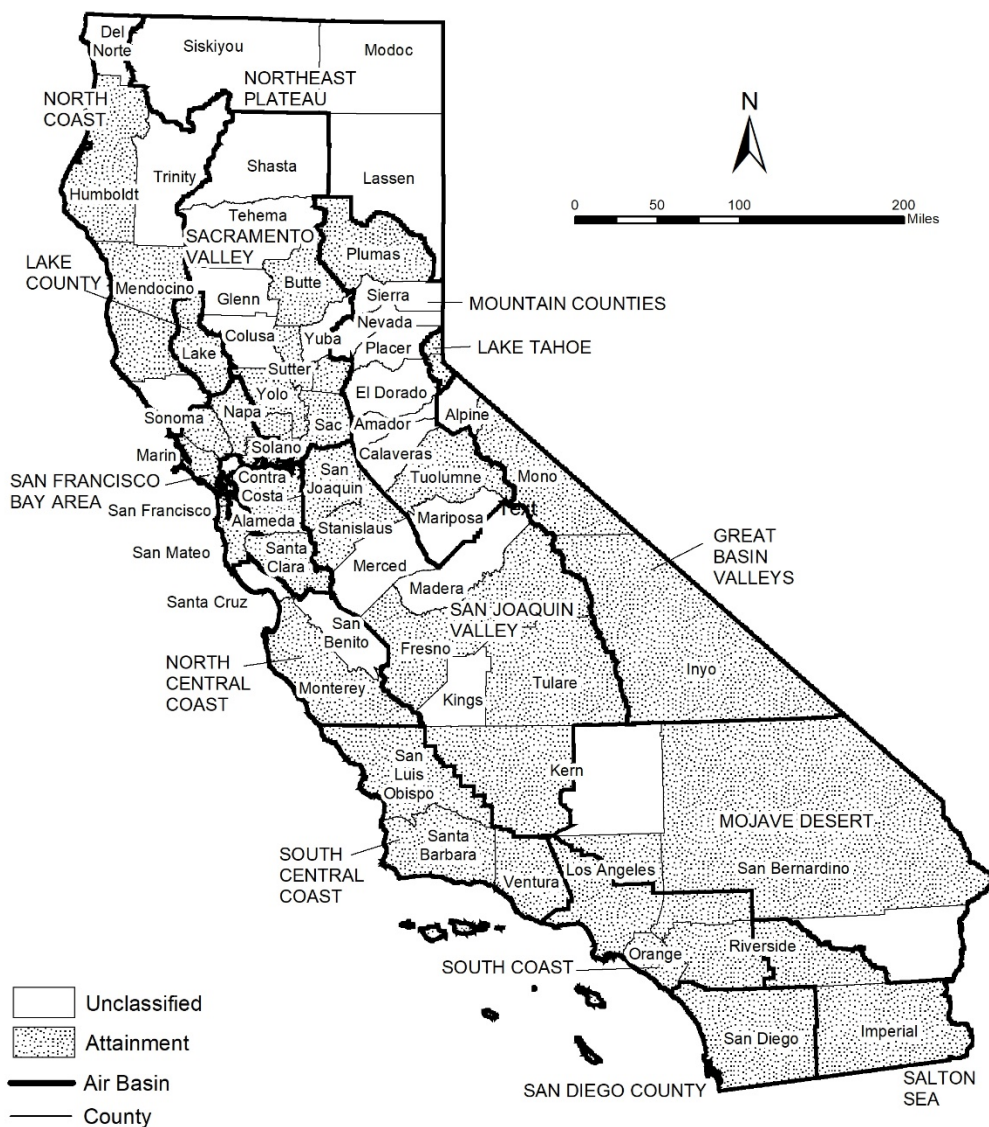
(1) California Code of Regulations, title 17, section 60200(b)

(2) California Code of Regulations, title 17, section 60200(c)

(3) California Code of Regulations, title 17, section 60200(a)

FIGURE 4

2018
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE



Source Date:
 October 2018
 Air Quality Planning and Science Division

TABLE 4

**California Ambient Air Quality Standards
Area Designation for Carbon Monoxide***

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					SACRAMENTO VALLEY AIR BASIN				
Alpine County			X		Butte County				X
Inyo County				X	Colusa County			X	
Mono County				X	Glenn County			X	
LAKE COUNTY AIR BASIN				X	Placer County (portion)				X
LAKE TAHOE AIR BASIN				X	Sacramento County				X
MOJAVE DESERT AIR BASIN					Shasta County			X	
Kern County (portion)			X		Solano County (portion)				X
Los Angeles County (portion)				X	Sutter County				X
Riverside County (portion)			X		Tehama County			X	
San Bernardino County (portion)				X	Yolo County				X
MOUNTAIN COUNTIES AIR BASIN					Yuba County			X	
Amador County			X		SALTON SEA AIR BASIN				X
Calaveras County			X		SAN DIEGO AIR BASIN				X
El Dorado County (portion)			X		SAN FRANCISCO BAY AREA AIR BASIN				X
Mariposa County			X		SAN JOAQUIN VALLEY AIR BASIN				
Nevada County			X		Fresno County				X
Placer County (portion)			X		Kern County (portion)				X
Plumas County				X	Kings County			X	
Sierra County			X		Madera County			X	
Tuolumne County				X	Merced County			X	
NORTH CENTRAL COAST AIR BASIN					San Joaquin County				X
Monterey County				X	Stanislaus County				X
San Benito County			X		Tulare County				X
Santa Cruz County			X		SOUTH CENTRAL COAST AIR BASIN				X
NORTH COAST AIR BASIN					SOUTH COAST AIR BASIN				X
Del Norte County			X						
Humboldt County				X					
Mendocino County				X					
Sonoma County (portion)			X						
Trinity County			X						
NORTHEAST PLATEAU AIR BASIN			X						

* The area designated for carbon monoxide is a county or portion of a county

FIGURE 5

2018
Area Designations for State
Ambient Air Quality Standards
NITROGEN DIOXIDE



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 5

**California Ambient Air Quality Standards
Area Designation for Nitrogen Dioxide**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			
NORTHEAST PLATEAU AIR BASIN			X	CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	X		
				Remainder of Air Basin			X

FIGURE 6



TABLE 6**California Ambient Air Quality Standards
Area Designation for Sulfur Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SALTON SEA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN DIEGO AIR BASIN		X
MOJAVE DESERT AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X			

* The area designated for sulfur dioxide is a county or portion of a county

FIGURE 7

2018
Area Designations for State
Ambient Air Quality Standards
SULFATES



Source Date:
 October 2018
 Air Quality Planning and Science Division

TABLE 7**California Ambient Air Quality Standards
Area Designation for Sulfates**

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTHEAST PLATEAU AIR BASIN			X				

FIGURE 8

2018
Area Designations for State
Ambient Air Quality Standards
LEAD



TABLE 8

**California Ambient Air Quality Standards
Area Designations for Lead (particulate)***

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SAN DIEGO AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN			X				

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

2018
Area Designations for State
Ambient Air Quality Standards
HYDROGEN SULFIDE

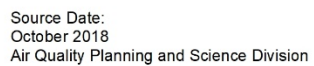


TABLE 9

**California Ambient Air Quality Standards
Area Designation for Hydrogen Sulfide***

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTH CENTRAL COAST AIR BASIN			X	
Alpine County			X		NORTH COAST AIR BASIN				
Inyo County				X	Del Norte County			X	
Mono County				X	Humboldt County				X
LAKE COUNTY AIR BASIN				X	Mendocino County			X	
LAKE TAHOE AIR BASIN			X		Sonoma County (portion)				
MOJAVE DESERT AIR BASIN					- Geyser Geothermal Area (2)				X
Kern County (portion)			X		- Remainder of County			X	
Los Angeles County (portion)			X		Trinity County			X	
Riverside County (portion)			X		NORTHEAST PLATEAU AIR BASIN			X	
San Bernardino County (portion)					SACRAMENTO VALLEY AIR BASIN			X	
- Searles Valley Planning Area (1)	X				SALTON SEA AIR BASIN			X	
- Remainder of County			X		SAN DIEGO AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN					SAN FRANCISCO BAY AREA AIR BASIN			X	
Amador County					SAN JOAQUIN VALLEY AIR BASIN			X	
- City of Sutter Creek	X				SOUTH CENTRAL COAST AIR BASIN				
- Remainder of County			X		San Luis Obispo County				X
Calaveras County			X		Santa Barbara County				X
El Dorado County (portion)			X		Ventura County			X	
Mariposa County			X		SOUTH COAST AIR BASIN			X	
Nevada County			X						
Placer County (portion)			X						
Plumas County			X						
Sierra County			X						
Tuolumne County			X						

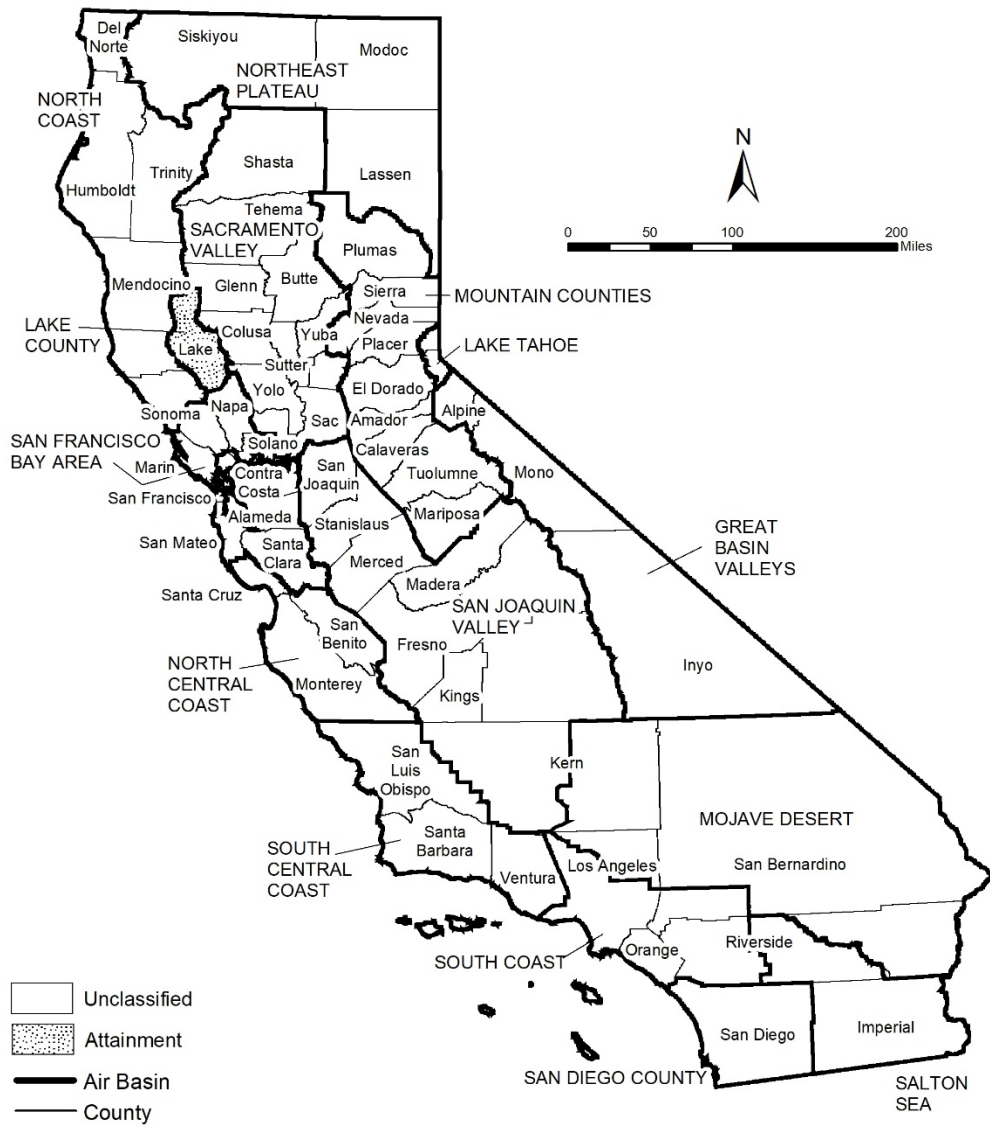
* The area designated for hydrogen sulfide is a county or portion of a county

(1) 52 Federal Register 29384 (August 7, 1987)

(2) California Code of Regulations, title 17, section 60200(d)

FIGURE 10

**2018
Area Designations for State
Ambient Air Quality Standards
VISIBILITY REDUCING PARTICLES**



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 10

**California Ambient Air Quality Standards
Area Designation for Visibility Reducing Particles**

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			X		SACRAMENTO VALLEY AIR BASIN			X	
LAKE COUNTY AIR BASIN				X	SALTON SEA AIR BASIN			X	
LAKE TAHOE AIR BASIN			X		SAN DIEGO AIR BASIN			X	
MOJAVE DESERT AIR BASIN			X		SAN FRANCISCO BAY AREA AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN			X		SAN JOAQUIN VALLEY AIR BASIN			X	
NORTH CENTRAL COAST AIR BASIN			X		SOUTH CENTRAL COAST AIR BASIN			X	
NORTH COAST AIR BASIN			X		SOUTH COAST AIR BASIN			X	
NORTHEAST PLATEAU AIR BASIN			X						

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

<https://www.epa.gov/green-book>

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

<https://www.epa.gov/criteria-air-pollutants>

Designation Categories

Suspended Particulate Matter (PM₁₀). The U.S. EPA uses three categories to designate areas with respect to PM₁₀:

- Attainment
- Nonattainment
- Unclassifiable

Ozone, Fine Suspended Particulate Matter (PM_{2.5}), Carbon Monoxide (CO), and Nitrogen Dioxide (NO₂). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment
- Unclassifiable/Attainment

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Original designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary PM_{2.5} standard of 12.0 µg/m³. New area designations reflecting this revised standard became final in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 µg/m³ as well as the 24-hour standard of 35 µg/m³, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO₂ standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO₂ standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO₂). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment,
- Unclassifiable, and
- Attainment/Unclassifiable.

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO₂ standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual

average standards. Area designations for the 1-hour SO₂ standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 µg/m³. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at:

https://ecfr.io/Title-40/se40.20.81_1305

FIGURE 11



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 11

**National Ambient Air Quality Standards
Area Designations for 8-Hour Ozone***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN (cont.)		
LAKE COUNTY AIR BASIN		X	Yolo County (2)	X	
LAKE TAHOE AIR BASIN		X	Yuba County		X
MOUNTAIN COUNTIES AIR BASIN			SAN DIEGO COUNTY	X	
Amador County	X		SAN FRANCISCO BAY AREA AIR BASIN	X	
Calaveras County	X		SAN JOAQUIN VALLEY AIR BASIN	X	
El Dorado County (portion) (2)	X		SOUTH CENTRAL COAST AIR BASIN (1)		
Mariposa County	X		San Luis Obispo County		
Nevada County			- Eastern San Luis Obispo County	X	
- Western Nevada County	X		- Remainder of County		X
- Remainder of County		X	Santa Barbara County		X
Placer County (portion) (2)	X		Ventura County		
Plumas County		X	- Area excluding Anacapa and San Nicolas Islands	X	
Sierra County		X	- Channel Islands (1)		X
Tuolumne County	X		SOUTH COAST AIR BASIN (1)	X	
NORTH CENTRAL COAST AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
NORTH COAST AIR BASIN		X	Kern County (portion)	X	
NORTHEAST PLATEAU AIR BASIN		X	- Indian Wells Valley		X
SACRAMENTO VALLEY AIR BASIN			Imperial County	X	
Butte County	X		Los Angeles County (portion)	X	
Colusa County		X	Riverside County (portion)		
Glenn County		X	- Coachella Valley	X	
Sacramento Metro Area (2)	X		- Non-AQMA portion		X
Shasta County		X	San Bernardino County		
Sutter County			- Western portion (AQMA)	X	
- Sutter Buttes	X		- Eastern portion (non-AQMA)		X
- Southern portion of Sutter County (2)	X				
- Remainder of Sutter County		X			
Tehama County					
- Tuscan Buttes	X				
- Remainder of Tehama County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2015 8-hour ozone standard of 0.070 ppm.

(1) South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

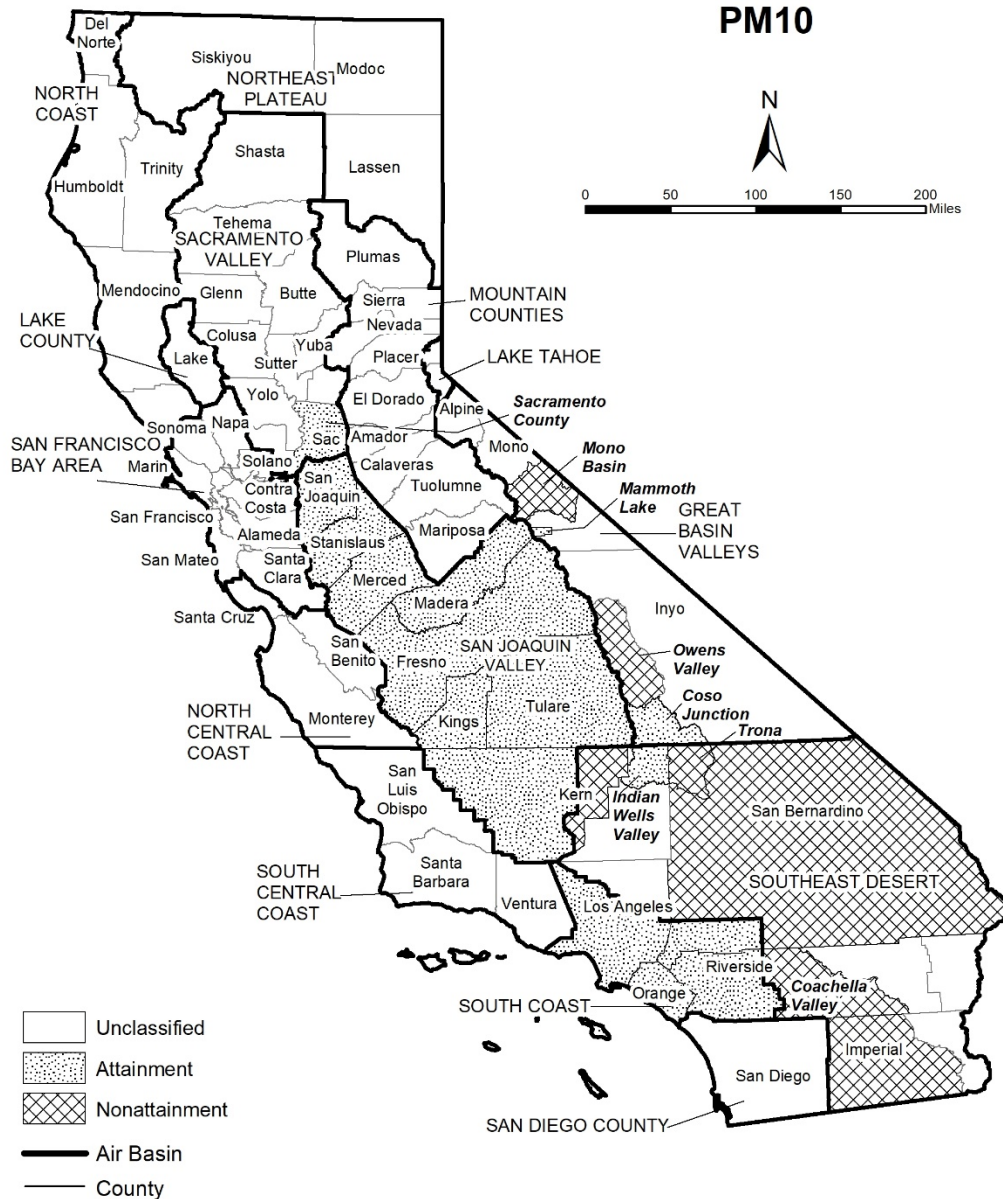
South Coast Air Basin:

Los Angeles County includes San Clemente and Santa Catalina Islands.

(2) For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

FIGURE 12

Area Designations for National Ambient Air Quality Standards PM10



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 12

**National Ambient Air Quality Standards
Area Designations for Suspended Particulate Matter (PM10)***

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN				SAN DIEGO COUNTY		X	
Alpine County		X		SAN FRANCISCO BAY AREA AIR BASIN		X	
Inyo County				SAN JOAQUIN VALLEY AIR BASIN			X
- Owens Valley Planning Area	X			SOUTH CENTRAL COAST AIR BASIN		X	
- Coso Junction			X	SOUTH COAST AIR BASIN			X
- Remainder of County		X		SOUTHEAST DESERT AIR BASIN			
Mono County				Eastern Kern County			
- Mammoth Lake Planning Area			X	- Indian Wells Valley			X
- Mono Lake Basin	X			- Portion within San Joaquin Valley Planning Area	X		
- Remainder of County		X		- Remainder of County		X	
LAKE COUNTY AIR BASIN		X		Imperial County			
LAKE TAHOE AIR BASIN		X		- Imperial Valley Planning Area	X		
MOUNTAIN COUNTIES AIR BASIN				- Remainder of County		X	
Placer County (portion) (2)		X		Los Angeles County (portion)		X	
Remainder of Air Basin		X		Riverside County (portion)			
NORTH CENTRAL COAST AIR BASIN		X		- Coachella Valley (3)	X		
NORTH COAST AIR BASIN		X		- Non-AQMA portion		X	
NORTHEAST PLATEAU AIR BASIN		X		San Bernardino County			
SACRAMENTO VALLEY AIR BASIN				- Trona	X		
Butte County		X		- Remainder of County	X		
Colusa County		X					
Glenn County		X					
Placer County (portion) (2)		X					
Sacramento County (1)			X				
Shasta County		X					
Solano County (portion)		X					
Sutter County		X					
Tehama County		X					
Yolo County		X					
Yuba County		X					

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

(1) Air quality in Sacramento County meets the national PM10 standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

(2) U.S. EPA designation puts the Sacramento Valley Air Basin portion of Placer County in the Mountain Counties Air Basin.

(3) Air quality in Coachella Valley meets the national PM10 standards. A request for redesignation to attainment has been submitted to U.S. EPA.

FIGURE 13

Area Designations for National Ambient Air Quality Standards PM2.5

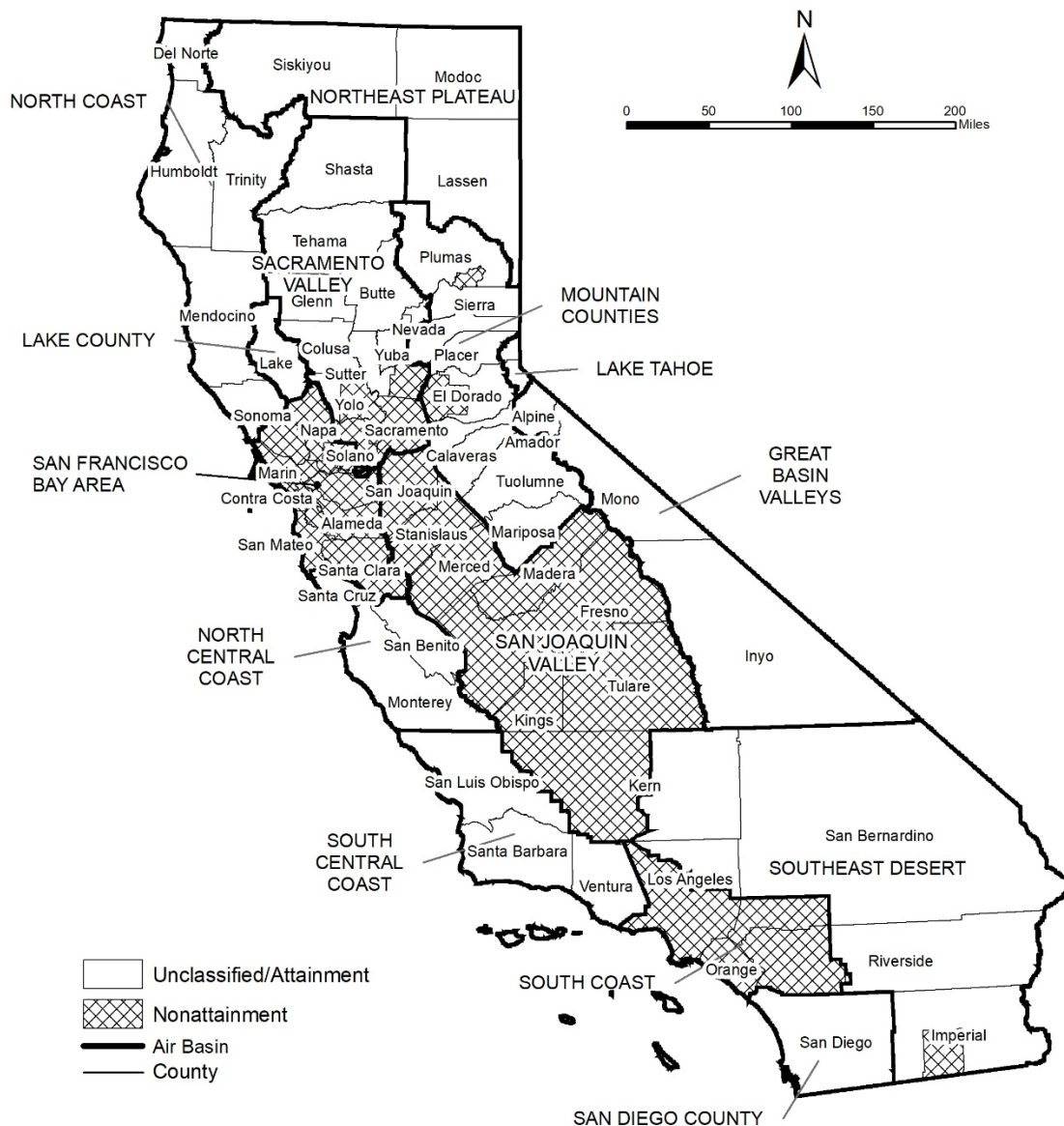


TABLE 13

**National Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN (2)	X	
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN	X	
MOUNTAIN COUNTIES AIR BASIN			SOUTH CENTRAL COAST AIR BASIN		X
Plumas County			SOUTH COAST AIR BASIN (3)	X	
- Portola Valley Portion of Plumas	X		SOUTHEAST DESERT AIR BASIN		
- Remainder of Plumas County		X	Imperial County (portion) (4)	X	
Remainder of Air Basin		X	Remainder of Air Basin		X
NORTH CENTRAL COAST AIR BASIN		X			
NORTH COAST AIR BASIN		X			
NORTHEAST PLATEAU AIR BASIN		X			
SACRAMENTO VALLEY AIR BASIN					
Sacramento Metro Area (1)	X				
Sutter County		X			
Yuba County (portion)		X			
Remainder of Air Basin		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour PM2.5 standard as well as the 1997 and 2012 PM2.5 annual standards.

(1) For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(2) Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(3) Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

(4) That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

FIGURE 14

**Area Designations for National
Ambient Air Quality Standards
CARBON MONOXIDE**



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 14**National Ambient Air Quality Standards
Area Designations for Carbon Monoxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 15

**Area Designations for National
Ambient Air Quality Standards
NITROGEN DIOXIDE**

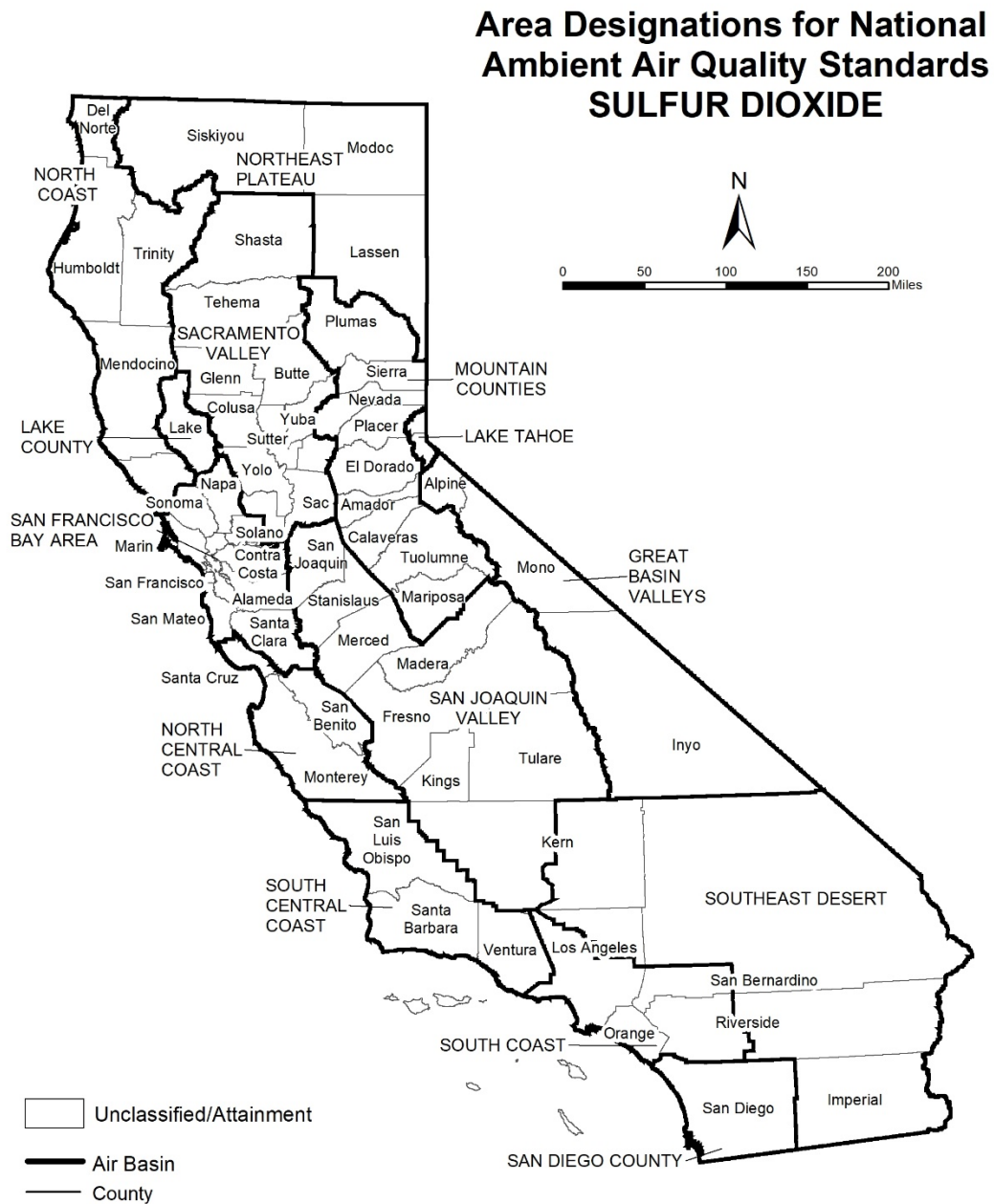


TABLE 15**National Ambient Air Quality Standards
Area Designations for Nitrogen Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 16



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 16

**National Ambient Air Quality Standards
Area Designations for Sulfur Dioxide***

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		
LAKE COUNTY AIR BASIN		X	San Luis Obispo County		X
LAKE TAHOE AIR BASIN		X	Santa Barbara County		X
MOUNTAIN COUNTIES AIR BASIN		X	Ventura County		X
NORTH CENTRAL COAST AIR BASIN		X	Channel Islands (1)		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
SACRAMENTO VALLEY AIR BASIN		X	Imperial County		X
SAN DIEGO COUNTY		X	Remainder of Air Basin		X
SAN FRANCISCO BAY AREA AIR BASIN		X			
SAN JOAQUIN VALLEY AIR BASIN					
Fresno County		X			
Kern County (portion)		X			
Kings County		X			
Madera County		X			
Merced County		X			
San Joaquin County		X			
Stanislaus County		X			
Tulare County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2010 1-hour SO₂ standard of 75 ppb.

(1) South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

FIGURE 17

Area Designations for National Ambient Air Quality Standards LEAD



TABLE 17

**National Ambient Air Quality Standards
Area Designations for Lead (particulate)**

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH COAST AIR BASIN		
NORTH COAST AIR BASIN		X	Los Angeles County (portion) (1)	X	
NORTHEAST PLATEAU AIR BASIN		X	Remainder of Air Basin		X
SACRAMENTO VALLEY AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

(1) Portion of County in Air Basin, not including Channel Islands

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APPENDIX 3.1:

CALEEMOD CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

Slover and Cactus Warehouse (Construction - Unmitigated)
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Construction Schedule adjusted as per information provided by the Client.

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

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Demolition -

Grading -

Vehicle Trips - Construction (Unmitigated) Run Only.

Energy Use - Construction (Unmitigated) Run Only.

Water And Wastewater - Construction (Unmitigated) Run Only.

Solid Waste - Construction (Unmitigated) Run Only.

Construction Off-road Equipment Mitigation -

Architectural Coating - Rule 1113

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	NumDays	300.00	150.00
tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	242.39	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_TTP	41.00	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
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	59,630,125.00	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.9516	68.2743	34.7516	0.0736	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	7,288.7778	7,288.7778	2.2468	0.0000	7,344.9464
2020	29.2645	60.9563	33.1381	0.0842	9.9574	2.4704	12.4278	3.7703	2.2728	6.0431	0.0000	8,294.6865	8,294.6865	2.2458	0.0000	8,328.4541
Maximum	29.2645	68.2743	34.7516	0.0842	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	8,294.6865	8,294.6865	2.2468	0.0000	8,328.4541

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	5.9516	68.2743	34.7516	0.0736	8.0742	2.9734	11.0476	4.0156	2.7355	6.7511	0.0000	7,288.7778	7,288.7778	2.2468	0.0000	7,344.9464
2020	29.2645	60.9563	33.1381	0.0842	4.0198	2.4704	6.4902	1.5066	2.2728	3.7794	0.0000	8,294.6865	8,294.6865	2.2458	0.0000	8,328.4541
Maximum	29.2645	68.2743	34.7516	0.0842	8.0742	2.9734	11.0476	4.0156	2.7355	6.7511	0.0000	8,294.6865	8,294.6865	2.2468	0.0000	8,328.4541

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	60.15	0.00	51.00	60.51	0.00	44.55	0.00	0.00	0.00	0.00	0.00	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	10/17/2019	11/13/2019	5	20	
2	Site Preparation	Site Preparation	11/14/2019	11/27/2019	5	10	
3	Grading	Grading	11/28/2019	1/8/2020	5	30	
4	Building Construction	Building Construction	1/9/2020	8/5/2020	5	150	
5	Architectural Coating	Architectural Coating	7/20/2020	9/25/2020	5	50	
6	Paving	Paving	8/6/2020	9/2/2020	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 386,783; Non-Residential Outdoor: 128,928; Striped Parking Area: 8,208 (Architectural Coating – sqft)

OffRoad Equipment

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	32.00	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	166.00	65.00	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	33.00	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					0.3483	0.0000	0.3483	0.0527	0.0000	0.0527			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	0.3483	1.7949	2.1432	0.0527	1.6697	1.7224		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.0112	0.4252	0.0702	1.2400e-003	0.0280	1.4400e-003	0.0294	7.6800e-003	1.3800e-003	9.0600e-003		131.1273	131.1273	8.0200e-003		131.3278
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	0.0888	0.0623	0.6157	1.5800e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		156.9571	156.9571	5.1500e-003		157.0858
Total	0.1000	0.4875	0.6858	2.8200e-003	0.1957	2.5700e-003	0.1982	0.0522	2.4200e-003	0.0546		288.0844	288.0844	0.0132		288.4136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1358	0.0000	0.1358	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.1358	1.7949	1.9307	0.0206	1.6697	1.6902	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.0112	0.4252	0.0702	1.2400e-003	0.0280	1.4400e-003	0.0294	7.6800e-003	1.3800e-003	9.0600e-003		131.1273	131.1273	8.0200e-003		131.3278
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	0.0888	0.0623	0.6157	1.5800e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		156.9571	156.9571	5.1500e-003		157.0858
Total	0.1000	0.4875	0.6858	2.8200e-003	0.1957	2.5700e-003	0.1982	0.0522	2.4200e-003	0.0546		288.0844	288.0844	0.0132		288.4136

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					20.1873	0.0000	20.1873	10.1597	0.0000	10.1597			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343		5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	20.1873	2.9720	23.1593	10.1597	2.7343	12.8940		5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.8730	0.0000	7.8730	3.9623	0.0000	3.9623			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	7.8730	2.9720	10.8451	3.9623	2.7343	6.6965	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030

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					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596		7,079.5017	7,079.5017	2.2399		7,135,4987
Total	5.4939	65.8336	33.9306	0.0715	9.7338	2.6735	12.4073	3.7110	2.4596	6.1706		7,079.5017	7,079.5017	2.2399		7,135,4987

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478
Total	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987
Total	5.4939	65.8336	33.9306	0.0715	3.7962	2.6735	6.4697	1.4473	2.4596	3.9069	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478
Total	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478

3.4 Grading - 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					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714		6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	9.7338	2.4690	12.2028	3.7110	2.2714	5.9825		6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.4 Grading - 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	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	3.7962	2.4690	6.2652	1.4473	2.2714	3.7187	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.4 Grading - 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	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013

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	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.2081	6.8037	1.5494	0.0170	0.4163	0.0320	0.4483	0.1199	0.0306	0.1505		1,787.5007	1,787.5007	0.1336		1,790.8395
Worker	0.9065	0.6118	6.1358	0.0169	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,682.8247	1,682.8247	0.0502		1,684.0806
Total	1.1146	7.4156	7.6851	0.0339	2.2718	0.0441	2.3159	0.6120	0.0418	0.6537		3,470.3254	3,470.3254	0.1838		3,474.9200

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	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290	0.0000	4,114.5597	4,114.5597	1.1279		4,142.7566
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290	0.0000	4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.2081	6.8037	1.5494	0.0170	0.4163	0.0320	0.4483	0.1199	0.0306	0.1505		1,787.5007	1,787.5007	0.1336		1,790.8395
Worker	0.9065	0.6118	6.1358	0.0169	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,682.8247	1,682.8247	0.0502		1,684.0806
Total	1.1146	7.4156	7.6851	0.0339	2.2718	0.0441	2.3159	0.6120	0.0418	0.6537		3,470.3254	3,470.3254	0.1838		3,474.9200

3.6 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	24.2837					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	24.6066	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.6 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	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871
Total	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871

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	24.2837					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	24.6066	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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.6 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	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871
Total	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871

3.7 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		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.7 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	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760

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	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

3.7 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	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760

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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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					
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					
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

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

Slover and Cactus Warehouse (Construction - Unmitigated)
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Construction Schedule adjusted as per information provided by the Client.

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

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Demolition -

Grading -

Vehicle Trips - Construction (Unmitigated) Run Only.

Energy Use - Construction (Unmitigated) Run Only.

Water And Wastewater - Construction (Unmitigated) Run Only.

Solid Waste - Construction (Unmitigated) Run Only.

Construction Off-road Equipment Mitigation -

Architectural Coating - Rule 1113

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	NumDays	300.00	150.00
tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	0.82	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	2.00	0.00
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	242.39	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_TTP	41.00	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
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	59,630,125.00	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

2.0 Emissions Summary**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.9517	68.2705	34.9276	0.0738	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	7,312.784 9	7,312.784 9	2.2477	0.0000	7,368.977 4
2020	29.2531	60.9526	33.2983	0.0872	9.9574	2.4704	12.4278	3.7703	2.2728	6.0431	0.0000	8,598.350 1	8,598.350 1	2.2466	0.0000	8,632.009 5
Maximum	29.2531	68.2705	34.9276	0.0872	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	8,598.350 1	8,598.350 1	2.2477	0.0000	8,632.009 5

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	5.9517	68.2705	34.9276	0.0738	8.0742	2.9734	11.0476	4.0156	2.7355	6.7511	0.0000	7,312.784 9	7,312.784 9	2.2477	0.0000	7,368.977 4
2020	29.2531	60.9526	33.2983	0.0872	4.0198	2.4704	6.4902	1.5066	2.2728	3.7794	0.0000	8,598.350 1	8,598.350 1	2.2466	0.0000	8,632.009 5
Maximum	29.2531	68.2705	34.9276	0.0872	8.0742	2.9734	11.0476	4.0156	2.7355	6.7511	0.0000	8,598.350 1	8,598.350 1	2.2477	0.0000	8,632.009 5

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	60.15	0.00	51.00	60.51	0.00	44.55	0.00	0.00	0.00	0.00	0.00	0.00

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	10/17/2019	11/13/2019	5	20	
2	Site Preparation	Site Preparation	11/14/2019	11/27/2019	5	10	
3	Grading	Grading	11/28/2019	1/8/2020	5	30	
4	Building Construction	Building Construction	1/9/2020	8/5/2020	5	150	
5	Architectural Coating	Architectural Coating	7/20/2020	9/25/2020	5	50	
6	Paving	Paving	8/6/2020	9/2/2020	5	20	

Acres of Grading (Site Preparation Phase): 20**Acres of Grading (Grading Phase): 105****Acres of Paving: 3.08****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 386,783; Non-Residential Outdoor: 128,928; Striped Parking Area: 8,208 (Architectural Coating – sqft)****OffRoad Equipment**

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	32.00	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	166.00	65.00	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	33.00	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					0.3483	0.0000	0.3483	0.0527	0.0000	0.0527			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	0.3483	1.7949	2.1432	0.0527	1.6697	1.7224		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.0107	0.4225	0.0612	1.2700e-003	0.0280	1.4200e-003	0.0294	7.6800e-003	1.3600e-003	9.0300e-003		134.6005	134.6005	7.3900e-003		134.7853
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	0.0889	0.0592	0.7477	1.7600e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		174.9624	174.9624	5.8700e-003		175.1091
Total	0.0996	0.4817	0.8089	3.0300e-003	0.1957	2.5500e-003	0.1982	0.0522	2.4000e-003	0.0545		309.5629	309.5629	0.0133		309.8944

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1358	0.0000	0.1358	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.1358	1.7949	1.9307	0.0206	1.6697	1.6902	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.0107	0.4225	0.0612	1.2700e-003	0.0280	1.4200e-003	0.0294	7.6800e-003	1.3600e-003	9.0300e-003		134.6005	134.6005	7.3900e-003		134.7853
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	0.0889	0.0592	0.7477	1.7600e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		174.9624	174.9624	5.8700e-003		175.1091
Total	0.0996	0.4817	0.8089	3.0300e-003	0.1957	2.5500e-003	0.1982	0.0522	2.4000e-003	0.0545		309.5629	309.5629	0.0133		309.8944

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					20.1873	0.0000	20.1873	10.1597	0.0000	10.1597			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343		5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	20.1873	2.9720	23.1593	10.1597	2.7343	12.8940		5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.8730	0.0000	7.8730	3.9623	0.0000	3.9623			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	7.8730	2.9720	10.8451	3.9623	2.7343	6.6965	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309

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					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596		7,079.5017	7,079.5017	2.2399		7,135,4987
Total	5.4939	65.8336	33.9306	0.0715	9.7338	2.6735	12.4073	3.7110	2.4596	6.1706		7,079.5017	7,079.5017	2.2399		7,135,4987

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787
Total	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596	0.0000	7,079.5017	7,079.5017	2.2399		7,135,4987
Total	5.4939	65.8336	33.9306	0.0715	3.7962	2.6735	6.4697	1.4473	2.4596	3.9069	0.0000	7,079.5017	7,079.5017	2.2399		7,135,4987

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787
Total	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787

3.4 Grading - 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					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714		6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	9.7338	2.4690	12.2028	3.7110	2.2714	5.9825		6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.4 Grading - 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	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	3.7962	2.4690	6.2652	1.4473	2.2714	3.7187	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.4 Grading - 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	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893

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	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1973	6.8594	1.3368	0.0176	0.4163	0.0316	0.4479	0.1199	0.0302	0.1501		1,859.659 0	1,859.659 0	0.1208		1,862.678 8
Worker	0.9060	0.5815	7.4655	0.0189	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,875.939 7	1,875.939 7	0.0573		1,877.371 4
Total	1.1033	7.4408	8.8023	0.0365	2.2718	0.0437	2.3155	0.6120	0.0414	0.6534		3,735.598 7	3,735.598 7	0.1781		3,740.050 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290	0.0000	4,114.559 7	4,114.559 7	1.1279		4,142.756 6
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290	0.0000	4,114.559 7	4,114.559 7	1.1279		4,142.756 6

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	0.1973	6.8594	1.3368	0.0176	0.4163	0.0316	0.4479	0.1199	0.0302	0.1501		1,859.659 0	1,859.659 0	0.1208		1,862.678 8
Worker	0.9060	0.5815	7.4655	0.0189	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,875.939 7	1,875.939 7	0.0573		1,877.371 4
Total	1.1033	7.4408	8.8023	0.0365	2.2718	0.0437	2.3155	0.6120	0.0414	0.6534		3,735.598 7	3,735.598 7	0.1781		3,740.050 1

3.6 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	24.2837					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	24.6066	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.6 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	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124
Total	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124

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	24.2837					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	24.6066	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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.6 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	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124
Total	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124

3.7 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		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.7 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	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420

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	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

3.7 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	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420

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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

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

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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					
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					
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

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Construction - Unmitigated) - San Bernardino-South Coast County, Summer

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

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APPENDIX 3.2:

CALEEMOD CONSTRUCTION (MITIGATED) EMISSIONS MODEL OUTPUTS

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

Slover and Cactus Warehouse (Construction - Mitigated)
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Construction Schedule adjusted as per information provided by the Client.

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

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Demolition -

Grading -

Vehicle Trips - Construction (Mitigated) Run Only.

Energy Use - Construction (Mitigated) Run Only.

Water And Wastewater - Construction (Mitigated) Run Only.

Solid Waste - Construction (Mitigated) Run Only.

Construction Off-road Equipment Mitigation - All equipment operating at >150 HP during Site Preparation are required to be equipped with Tier 3 or better engines.

Architectural Coating - Rule 1113

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
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	150.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	0.35	0.00
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
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	242.39	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_TTP	41.00	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
tblVehicleTrips	PR_TP	92.00	0.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	59,630,125.00	0.00

2.0 Emissions Summary

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.9516	68.2743	34.7516	0.0736	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	7,288.777 8	7,288.777 8	2.2468	0.0000	7,344.946 4
2020	29.2645	60.9563	33.1381	0.0842	9.9574	2.4704	12.4278	3.7703	2.2728	6.0431	0.0000	8,294.686 5	8,294.686 5	2.2458	0.0000	8,328.454 1
Maximum	29.2645	68.2743	34.7516	0.0842	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	8,294.686 5	8,294.686 5	2.2468	0.0000	8,328.454 1

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	4.7823	58.1484	36.2834	0.0736	8.0742	2.3165	10.1130	4.0156	2.1473	5.9296	0.0000	7,288.777 8	7,288.777 8	2.2468	0.0000	7,344.946 4
2020	28.7551	54.0400	34.8162	0.0842	4.0198	2.1471	6.1669	1.5066	1.9915	3.4981	0.0000	8,294.686 5	8,294.686 5	2.2458	0.0000	8,328.454 1
Maximum	28.7551	58.1484	36.2834	0.0842	8.0742	2.3165	10.1130	4.0156	2.1473	5.9296	0.0000	8,294.686 5	8,294.686 5	2.2468	0.0000	8,328.454 1

	ROG	NOx	CO	SO2	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	4.77	13.19	-4.73	0.00	60.15	18.00	54.51	60.51	17.36	50.36	0.00	0.00	0.00	0.00	0.00	0.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	10/17/2019	11/13/2019	5	20	
2	Site Preparation	Site Preparation	11/14/2019	11/27/2019	5	10	
3	Grading	Grading	11/28/2019	1/8/2020	5	30	
4	Building Construction	Building Construction	1/9/2020	8/5/2020	5	150	
5	Architectural Coating	Architectural Coating	7/20/2020	9/25/2020	5	50	
6	Paving	Paving	8/6/2020	9/2/2020	5	20	

Acres of Grading (Site Preparation Phase): 20**Acres of Grading (Grading Phase): 105****Acres of Paving: 3.08****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 386,783; Non-Residential Outdoor: 128,928; Striped Parking Area: 8,208 (Architectural Coating – sqft)****OffRoad Equipment**

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	32.00	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	166.00	65.00	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	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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					0.3483	0.0000	0.3483	0.0527	0.0000	0.0527			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	0.3483	1.7949	2.1432	0.0527	1.6697	1.7224		3,816.899 4	3,816.899 4	1.0618		3,843.445 1

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.0112	0.4252	0.0702	1.2400e-003	0.0280	1.4400e-003	0.0294	7.6800e-003	1.3800e-003	9.0600e-003		131.1273	131.1273	8.0200e-003		131.3278
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	0.0888	0.0623	0.6157	1.5800e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		156.9571	156.9571	5.1500e-003		157.0858
Total	0.1000	0.4875	0.6858	2.8200e-003	0.1957	2.5700e-003	0.1982	0.0522	2.4200e-003	0.0546		288.0844	288.0844	0.0132		288.4136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1358	0.0000	0.1358	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	2.5879	27.7513	22.3065	0.0388		1.3595	1.3595		1.2814	1.2814	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	2.5879	27.7513	22.3065	0.0388	0.1358	1.3595	1.4953	0.0206	1.2814	1.3019	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.0112	0.4252	0.0702	1.2400e-003	0.0280	1.4400e-003	0.0294	7.6800e-003	1.3800e-003	9.0600e-003		131.1273	131.1273	8.0200e-003		131.3278
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	0.0888	0.0623	0.6157	1.5800e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		156.9571	156.9571	5.1500e-003		157.0858
Total	0.1000	0.4875	0.6858	2.8200e-003	0.1957	2.5700e-003	0.1982	0.0522	2.4200e-003	0.0546		288.0844	288.0844	0.0132		288.4136

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					20.1873	0.0000	20.1873	10.1597	0.0000	10.1597			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343		5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	20.1873	2.9720	23.1593	10.1597	2.7343	12.8940		5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.8730	0.0000	7.8730	3.9623	0.0000	3.9623			0.0000			0.0000
Off-Road	3.7222	48.6473	26.3576	0.0570		2.0374	2.0374		1.9127	1.9127	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710
Total	3.7222	48.6473	26.3576	0.0570	7.8730	2.0374	9.9104	3.9623	1.9127	5.8750	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030
Total	0.1066	0.0747	0.7388	1.8900e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		188.3485	188.3485	6.1800e-003		188.5030

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					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596		7,079.5017	7,079.5017	2.2399		7,135,4987
Total	5.4939	65.8336	33.9306	0.0715	9.7338	2.6735	12.4073	3.7110	2.4596	6.1706		7,079.5017	7,079.5017	2.2399		7,135,4987

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478
Total	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	4.6639	58.0654	35.4624	0.0715		2.3150	2.3150		2.1459	2.1459	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987
Total	4.6639	58.0654	35.4624	0.0715	3.7962	2.3150	6.1112	1.4473	2.1459	3.5932	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478
Total	0.1184	0.0830	0.8209	2.1000e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		209.2761	209.2761	6.8700e-003		209.4478

3.4 Grading - 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					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714		6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	9.7338	2.4690	12.2028	3.7110	2.2714	5.9825		6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.4 Grading - 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	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	4.4140	53.9663	34.0770	0.0715		2.1457	2.1457		1.9901	1.9901	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	4.4140	53.9663	34.0770	0.0715	3.7962	2.1457	5.9419	1.4473	1.9901	3.4374	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.4 Grading - 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	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013

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	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.2081	6.8037	1.5494	0.0170	0.4163	0.0320	0.4483	0.1199	0.0306	0.1505		1,787.5007	1,787.5007	0.1336		1,790.8395
Worker	0.9065	0.6118	6.1358	0.0169	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,682.8247	1,682.8247	0.0502		1,684.0806
Total	1.1146	7.4156	7.6851	0.0339	2.2718	0.0441	2.3159	0.6120	0.0418	0.6537		3,470.3254	3,470.3254	0.1838		3,474.9200

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	2.8537	31.7697	20.8466	0.0430		1.4536	1.4536		1.3749	1.3749	0.0000	4,114.5597	4,114.5597	1.1279		4,142.7566
Total	2.8537	31.7697	20.8466	0.0430		1.4536	1.4536		1.3749	1.3749	0.0000	4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.2081	6.8037	1.5494	0.0170	0.4163	0.0320	0.4483	0.1199	0.0306	0.1505		1,787.5007	1,787.5007	0.1336		1,790.8395
Worker	0.9065	0.6118	6.1358	0.0169	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,682.8247	1,682.8247	0.0502		1,684.0806
Total	1.1146	7.4156	7.6851	0.0339	2.2718	0.0441	2.3159	0.6120	0.0418	0.6537		3,470.3254	3,470.3254	0.1838		3,474.9200

3.6 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	24.2837					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	24.6066	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.6 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	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871
Total	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871

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	24.2837					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	24.6066	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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.6 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	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871
Total	0.1802	0.1216	1.2198	3.3600e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		334.5374	334.5374	9.9900e-003		334.7871

3.7 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		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.7 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	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760

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	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

3.7 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	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760

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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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					
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					
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

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

Slover and Cactus Warehouse (Construction - Mitigated)
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Construction Schedule adjusted as per information provided by the Client.

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

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Off-road Equipment -

Off-road Equipment - Crawler Tractors used in lieu of Tractors/Loaders/Backhoes.

Demolition -

Grading -

Vehicle Trips - Construction (Mitigated) Run Only.

Energy Use - Construction (Mitigated) Run Only.

Water And Wastewater - Construction (Mitigated) Run Only.

Solid Waste - Construction (Mitigated) Run Only.

Construction Off-road Equipment Mitigation - All equipment operating at >150 HP during Site Preparation are required to be equipped with Tier 3 or better engines.

Architectural Coating - Rule 1113

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
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	300.00	150.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

tblConstructionPhase	NumDays	20.00	50.00
tblEnergyUse	LightingElect	0.35	0.00
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
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	242.39	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_TTP	41.00	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
tblVehicleTrips	PR_TP	92.00	0.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	59,630,125.00	0.00

2.0 Emissions Summary

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.9517	68.2705	34.9276	0.0738	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	7,312.784 9	7,312.784 9	2.2477	0.0000	7,368.977 4
2020	29.2531	60.9526	33.2983	0.0872	9.9574	2.4704	12.4278	3.7703	2.2728	6.0431	0.0000	8,598.350 1	8,598.350 1	2.2466	0.0000	8,632.009 5
Maximum	29.2531	68.2705	34.9276	0.0872	20.3885	2.9734	23.3618	10.2131	2.7355	12.9486	0.0000	8,598.350 1	8,598.350 1	2.2477	0.0000	8,632.009 5

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	4.7825	58.1443	36.4594	0.0738	8.0742	2.3165	10.1130	4.0156	2.1473	5.9296	0.0000	7,312.784 9	7,312.784 9	2.2477	0.0000	7,368.977 4
2020	28.7437	54.0363	34.9764	0.0872	4.0198	2.1471	6.1669	1.5066	1.9915	3.4981	0.0000	8,598.350 1	8,598.350 1	2.2466	0.0000	8,632.009 5
Maximum	28.7437	58.1443	36.4594	0.0872	8.0742	2.3165	10.1130	4.0156	2.1473	5.9296	0.0000	8,598.350 1	8,598.350 1	2.2477	0.0000	8,632.009 5

	ROG	NOx	CO	SO2	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	4.77	13.19	-4.70	0.00	60.15	18.00	54.51	60.51	17.36	50.36	0.00	0.00	0.00	0.00	0.00	0.00

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
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	5.8251	5.7000e-004	0.0616	0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000	2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004	0.0000	0.1401

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	10/17/2019	11/13/2019	5	20	
2	Site Preparation	Site Preparation	11/14/2019	11/27/2019	5	10	
3	Grading	Grading	11/28/2019	1/8/2020	5	30	
4	Building Construction	Building Construction	1/9/2020	8/5/2020	5	150	
5	Architectural Coating	Architectural Coating	7/20/2020	9/25/2020	5	50	
6	Paving	Paving	8/6/2020	9/2/2020	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.08

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 386,783; Non-Residential Outdoor: 128,928; Striped Parking Area: 8,208 (Architectural Coating – sqft)

OffRoad Equipment

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	2	8.00	212	0.43
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Crawler Tractors	3	8.00	212	0.43
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	32.00	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	166.00	65.00	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	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

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					0.3483	0.0000	0.3483	0.0527	0.0000	0.0527			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	0.3483	1.7949	2.1432	0.0527	1.6697	1.7224		3,816.8994	3,816.8994	1.0618		3,843.4451

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.0107	0.4225	0.0612	1.2700e-003	0.0280	1.4200e-003	0.0294	7.6800e-003	1.3600e-003	9.0300e-003		134.6005	134.6005	7.3900e-003		134.7853
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	0.0889	0.0592	0.7477	1.7600e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		174.9624	174.9624	5.8700e-003		175.1091
Total	0.0996	0.4817	0.8089	3.0300e-003	0.1957	2.5500e-003	0.1982	0.0522	2.4000e-003	0.0545		309.5629	309.5629	0.0133		309.8944

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1358	0.0000	0.1358	0.0206	0.0000	0.0206			0.0000			0.0000
Off-Road	2.5879	27.7513	22.3065	0.0388		1.3595	1.3595		1.2814	1.2814	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	2.5879	27.7513	22.3065	0.0388	0.1358	1.3595	1.4953	0.0206	1.2814	1.3019	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.0107	0.4225	0.0612	1.2700e-003	0.0280	1.4200e-003	0.0294	7.6800e-003	1.3600e-003	9.0300e-003		134.6005	134.6005	7.3900e-003		134.7853
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	0.0889	0.0592	0.7477	1.7600e-003	0.1677	1.1300e-003	0.1688	0.0445	1.0400e-003	0.0455		174.9624	174.9624	5.8700e-003		175.1091
Total	0.0996	0.4817	0.8089	3.0300e-003	0.1957	2.5500e-003	0.1982	0.0522	2.4000e-003	0.0545		309.5629	309.5629	0.0133		309.8944

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					20.1873	0.0000	20.1873	10.1597	0.0000	10.1597			0.0000			0.0000
Off-Road	5.8450	68.1996	23.1708	0.0570		2.9720	2.9720		2.7343	2.7343		5,645.4173	5,645.4173	1.7862		5,690.0710
Total	5.8450	68.1996	23.1708	0.0570	20.1873	2.9720	23.1593	10.1597	2.7343	12.8940		5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.8730	0.0000	7.8730	3.9623	0.0000	3.9623			0.0000			0.0000
Off-Road	3.7222	48.6473	26.3576	0.0570		2.0374	2.0374		1.9127	1.9127	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710
Total	3.7222	48.6473	26.3576	0.0570	7.8730	2.0374	9.9104	3.9623	1.9127	5.8750	0.0000	5,645.4173	5,645.4173	1.7862		5,690.0710

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309
Total	0.1067	0.0710	0.8973	2.1100e-003	0.2012	1.3500e-003	0.2026	0.0534	1.2500e-003	0.0546		209.9549	209.9549	7.0400e-003		210.1309

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					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.4939	65.8336	33.9306	0.0715		2.6735	2.6735		2.4596	2.4596		7,079.5017	7,079.5017	2.2399		7,135,4987
Total	5.4939	65.8336	33.9306	0.0715	9.7338	2.6735	12.4073	3.7110	2.4596	6.1706		7,079.5017	7,079.5017	2.2399		7,135,4987

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787
Total	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	4.6639	58.0654	35.4624	0.0715		2.3150	2.3150		2.1459	2.1459	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987
Total	4.6639	58.0654	35.4624	0.0715	3.7962	2.3150	6.1112	1.4473	2.1459	3.5932	0.0000	7,079.5017	7,079.5017	2.2399		7,135.4987

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787
Total	0.1186	0.0789	0.9970	2.3400e-003	0.2236	1.5000e-003	0.2251	0.0593	1.3800e-003	0.0607		233.2832	233.2832	7.8200e-003		233.4787

3.4 Grading - 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					
Fugitive Dust					9.7338	0.0000	9.7338	3.7110	0.0000	3.7110			0.0000			0.0000
Off-Road	5.1888	60.8826	32.3988	0.0715		2.4690	2.4690		2.2714	2.2714		6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	5.1888	60.8826	32.3988	0.0715	9.7338	2.4690	12.2028	3.7110	2.2714	5.9825		6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.4 Grading - 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	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893

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					3.7962	0.0000	3.7962	1.4473	0.0000	1.4473			0.0000			0.0000
Off-Road	4.4140	53.9663	34.0770	0.0715		2.1457	2.1457		1.9901	1.9901	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1
Total	4.4140	53.9663	34.0770	0.0715	3.7962	2.1457	5.9419	1.4473	1.9901	3.4374	0.0000	6,925.105 1	6,925.105 1	2.2397		6,981.098 1

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.4 Grading - 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	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893

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	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566
Total	3.3632	36.6770	18.6286	0.0430		1.6373	1.6373		1.5290	1.5290		4,114.5597	4,114.5597	1.1279		4,142.7566

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1973	6.8594	1.3368	0.0176	0.4163	0.0316	0.4479	0.1199	0.0302	0.1501		1,859.659 0	1,859.659 0	0.1208		1,862.678 8
Worker	0.9060	0.5815	7.4655	0.0189	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,875.939 7	1,875.939 7	0.0573		1,877.371 4
Total	1.1033	7.4408	8.8023	0.0365	2.2718	0.0437	2.3155	0.6120	0.0414	0.6534		3,735.598 7	3,735.598 7	0.1781		3,740.050 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.8537	31.7697	20.8466	0.0430		1.4536	1.4536		1.3749	1.3749	0.0000	4,114.559 7	4,114.559 7	1.1279		4,142.756 6
Total	2.8537	31.7697	20.8466	0.0430		1.4536	1.4536		1.3749	1.3749	0.0000	4,114.559 7	4,114.559 7	1.1279		4,142.756 6

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	0.1973	6.8594	1.3368	0.0176	0.4163	0.0316	0.4479	0.1199	0.0302	0.1501		1,859.659 0	1,859.659 0	0.1208		1,862.678 8
Worker	0.9060	0.5815	7.4655	0.0189	1.8555	0.0122	1.8677	0.4921	0.0112	0.5033		1,875.939 7	1,875.939 7	0.0573		1,877.371 4
Total	1.1033	7.4408	8.8023	0.0365	2.2718	0.0437	2.3155	0.6120	0.0414	0.6534		3,735.598 7	3,735.598 7	0.1781		3,740.050 1

3.6 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	24.2837					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	24.6066	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.6 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	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124
Total	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124

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	24.2837					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	24.6066	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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.6 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	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124
Total	0.1801	0.1156	1.4841	3.7500e-003	0.3689	2.4200e-003	0.3713	0.0978	2.2300e-003	0.1001		372.9278	372.9278	0.0114		373.2124

3.7 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		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.7 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	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420

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	0.4035					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7600	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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

3.7 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	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420

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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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
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
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

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

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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					
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					
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

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Construction - Mitigated) - San Bernardino-South Coast County, Summer

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

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APPENDIX 3.3:

CALEEMOD OPERATIONAL (PASSENGER CARS) EMISSIONS MODEL OUTPUTS

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

Slover and Cactus Warehouse (Operations - Passenger Cars)
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard stalls

Construction Phase - Operations (Passenger Car) Run Only.

Off-road Equipment - Operations (Passenger Car) Run Only.

Trips and VMT - Operations (Passenger Car) Run Only.

Vehicle Trips - Operations (Passenger Car) Run Only.

Fleet Mix - Operations (Passenger Car) Run Only.

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	11/13/2019	10/17/2019
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.15
tblVehicleTrips	SU_TR	1.68	0.06

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

tblVehicleTrips	WD_TR	1.68	1.39
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

[illegible]

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.4568	0.8394	9.3271	0.0355	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,538.8200	3,538.8200	0.0716		3,540.6108
Total	6.2973	0.9806	9.5068	0.0363	4.5266	0.0356	4.5622	1.2000	0.0336	1.2336		3,707.6687	3,707.6687	0.0752	3.0900e-003	3,710.4709

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.4568	0.8394	9.3271	0.0355	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,538.8200	3,538.8200	0.0716		3,540.6108
Total	6.2973	0.9806	9.5068	0.0363	4.5266	0.0356	4.5622	1.2000	0.0336	1.2336		3,707.6687	3,707.6687	0.0752	3.0900e-003	3,710.4709

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	10/17/2019	10/17/2019	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 3.08****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	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

3.1 Mitigation Measures Construction**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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	0.4568	0.8394	9.3271	0.0355	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,538.8200	3,538.8200	0.0716		3,540.6108
Unmitigated	0.4568	0.8394	9.3271	0.0355	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,538.8200	3,538.8200	0.0716		3,540.6108

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	358.93	38.68	15.47	1,595,902	1,595,902
Total	358.93	38.68	15.47	1,595,902	1,595,902

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
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

4.4 Fleet Mix

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
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	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
NaturalGas Unmitigated	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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					
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	1434.1	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

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					
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	1.4341	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

Slover and Cactus Warehouse (Operations - Passenger Cars)
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard stalls

Construction Phase - Operations (Passenger Car) Run Only.

Off-road Equipment - Operations (Passenger Car) Run Only.

Trips and VMT - Operations (Passenger Car) Run Only.

Vehicle Trips - Operations (Passenger Car) Run Only.

Fleet Mix - Operations (Passenger Car) Run Only.

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	11/13/2019	10/17/2019
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	0.15
tblVehicleTrips	SU_TR	1.68	0.06

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

tblVehicleTrips	WD_TR	1.68	1.39
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2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible]

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

[illegible]

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.5589	0.8045	11.5899	0.0397	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,955.2053	3,955.2053	0.0822		3,957.2593
Total	6.3994	0.9457	11.7697	0.0405	4.5266	0.0356	4.5622	1.2000	0.0336	1.2336		4,124.0540	4,124.0540	0.0857	3.0900e-003	4,127.1194

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.5589	0.8045	11.5899	0.0397	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,955.2053	3,955.2053	0.0822		3,957.2593
Total	6.3994	0.9457	11.7697	0.0405	4.5266	0.0356	4.5622	1.2000	0.0336	1.2336		4,124.0540	4,124.0540	0.0857	3.0900e-003	4,127.1194

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	10/17/2019	10/17/2019	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 3.08****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	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

3.1 Mitigation Measures Construction**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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	0.5589	0.8045	11.5899	0.0397	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,955.2053	3,955.2053	0.0822		3,957.2593
Unmitigated	0.5589	0.8045	11.5899	0.0397	4.5266	0.0247	4.5513	1.2000	0.0227	1.2227		3,955.2053	3,955.2053	0.0822		3,957.2593

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	358.93	38.68	15.47	1,595,902	1,595,902
Total	358.93	38.68	15.47	1,595,902	1,595,902

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
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

4.4 Fleet Mix

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
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	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
NaturalGas Unmitigated	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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					
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	1434.1	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

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					
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	1.4341	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Operations - Passenger Cars) - San Bernardino-South Coast County, Summer

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

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APPENDIX 3.4:

CALEEMOD OPERATIONAL (TRUCKS) EMISSIONS MODEL OUTPUTS

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

Slover and Cactus Warehouse (Operations - Trucks)
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Operatoins (Truck) Run Only.

Off-road Equipment - Operatoins (Truck) Run Only.

Trips and VMT - Operations (Truck) Run Only.

Vehicle Trips - Operations (Truck) Run Only.

Fleet Mix - Fleet Mix based on information from the Trip Generation.

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	11/13/2019	10/17/2019
tblFleetMix	HHD	0.06	0.62
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.21
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

tblVehicleTrips	ST_TR	1.68	0.35
tblVehicleTrips	SU_TR	1.68	0.35
tblVehicleTrips	WD_TR	1.68	0.35

2.0 Emissions Summary

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.8866	27.9913	6.6410	0.1030	3.1996	0.1751	3.3747	0.8996	0.1675	1.0671		10,867.7048	10,867.7048	0.3945		10,877.5667
Total	6.7272	28.1324	6.8207	0.1038	3.1996	0.1860	3.3856	0.8996	0.1784	1.0780		11,036.5534	11,036.5534	0.3981	3.0900e-003	11,047.4267

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.8866	27.9913	6.6410	0.1030	3.1996	0.1751	3.3747	0.8996	0.1675	1.0671		10,867.7048	10,867.7048	0.3945		10,877.5667
Total	6.7272	28.1324	6.8207	0.1038	3.1996	0.1860	3.3856	0.8996	0.1784	1.0780		11,036.5534	11,036.5534	0.3981	3.0900e-003	11,047.4267

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	10/17/2019	10/17/2019	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 3.08****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	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

3.1 Mitigation Measures Construction**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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	0.8866	27.9913	6.6410	0.1030	3.1996	0.1751	3.3747	0.8996	0.1675	1.0671		10,867.70 48	10,867.70 48	0.3945		10,877.56 67
Unmitigated	0.8866	27.9913	6.6410	0.1030	3.1996	0.1751	3.3747	0.8996	0.1675	1.0671		10,867.70 48	10,867.70 48	0.3945		10,877.56 67

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	89.74	89.74	89.74	1,306,546	1,306,546
Total	89.74	89.74	89.74	1,306,546	1,306,546

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.210000	0.620000	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	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
NaturalGas Unmitigated	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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					
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	1434.1	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

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					
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	1.4341	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Winter

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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

Slover and Cactus Warehouse (Operations - Trucks)

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	257.86	1000sqft	10.19	257,855.00	0
Parking Lot	342.00	Space	3.08	136,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
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

Project Characteristics -

Land Use - Lot Acreage based on Site Plan. Number of Parking Spaces based on the provided 134 standard stalls + 104 trailer parking (208 standard stalls) = 342 standard spaces

Construction Phase - Operations (Truck) Run Only.

Off-road Equipment - Operations (Truck) Run Only.

Trips and VMT - Operations (Truck) Run Only.

Vehicle Trips - Operations (Truck) Run Only.

Fleet Mix - Fleet Mix based on information from the Trip Generation.

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	11/13/2019	10/17/2019
tblFleetMix	HHD	0.06	0.62
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.4600e-003	0.00
tblFleetMix	MCY	6.1170e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0820e-003	0.00
tblFleetMix	MHD	0.02	0.21
tblFleetMix	OBUS	1.3370e-003	0.00
tblFleetMix	SBUS	8.1700e-004	0.00
tblFleetMix	UBUS	1.6570e-003	0.00
tblLandUse	LandUseSquareFeet	257,860.00	257,855.00
tblLandUse	LotAcreage	5.92	10.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

tblVehicleTrips	ST_TR	1.68	0.35
tblVehicleTrips	SU_TR	1.68	0.35
tblVehicleTrips	WD_TR	1.68	0.35

2.0 Emissions Summary

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.8712	27.3028	6.3700	0.1042	3.1996	0.1745	3.3741	0.8996	0.1669	1.0665		10,989.4271	10,989.4271	0.3737		10,998.7693
Total	6.7118	27.4440	6.5497	0.1050	3.1996	0.1854	3.3850	0.8996	0.1778	1.0774		11,158.2757	11,158.2757	0.3773	3.0900e-003	11,168.6293

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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Energy	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Mobile	0.8712	27.3028	6.3700	0.1042	3.1996	0.1745	3.3741	0.8996	0.1669	1.0665		10,989.4271	10,989.4271	0.3737		10,998.7693
Total	6.7118	27.4440	6.5497	0.1050	3.1996	0.1854	3.3850	0.8996	0.1778	1.0774		11,158.2757	11,158.2757	0.3773	3.0900e-003	11,168.6293

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	10/17/2019	10/17/2019	5	1	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 0****Acres of Paving: 3.08****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	Excavators	0	8.00	158	0.38
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

3.1 Mitigation Measures Construction**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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	0.8712	27.3028	6.3700	0.1042	3.1996	0.1745	3.3741	0.8996	0.1669	1.0665		10,989.42 71	10,989.42 71	0.3737		10,998.76 93
Unmitigated	0.8712	27.3028	6.3700	0.1042	3.1996	0.1745	3.3741	0.8996	0.1669	1.0665		10,989.42 71	10,989.42 71	0.3737		10,998.76 93

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	89.74	89.74	89.74	1,306,546	1,306,546
Total	89.74	89.74	89.74	1,306,546	1,306,546

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.546179	0.037976	0.179086	0.122965	0.018430	0.005460	0.017497	0.061396	0.001337	0.001657	0.006117	0.000817	0.001082
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.210000	0.620000	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	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
NaturalGas Unmitigated	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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					
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	1434.1	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

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					
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	1.4341	0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200
Total		0.0155	0.1406	0.1181	8.4000e-004		0.0107	0.0107		0.0107	0.0107		168.7174	168.7174	3.2300e-003	3.0900e-003	169.7200

6.0 Area Detail**6.1 Mitigation Measures Area**

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, 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	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Unmitigated	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

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	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6653					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.1540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.8000e-003	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401
Total	5.8251	5.7000e-004	0.0616	0.0000		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		0.1313	0.1313	3.5000e-004		0.1401

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Slover and Cactus Warehouse (Operations - Trucks) - San Bernardino-South Coast County, Summer

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
