

## **Appendix 3a**

### **Air Quality Impact Analysis**

**SOUTH MILLIKEN DISTRIBUTION CENTER**  
Project No. PLN17-20013  
**INITIAL STUDY**





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**S. Milliken Distribution Center**  
**AIR QUALITY IMPACT ANALYSIS**  
**CITY OF EASTVALE**

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10765-03 AQ Report



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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
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BACMs	Best Available Control Measures
BMPs	Best Management Practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
Caleemod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
EPA	Environmental Protection Agency
LST	Localized Significance Threshold
MMs	Mitigation Measures
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen Dioxide
NOx	Oxides of Nitrogen
Pb	Lead
PM10	Particulate Matter 10 microns in diameter or less
PM2.5	Particulate Matter 2.5 microns in diameter or less
PPM	Parts Per Million
Project	S. Milliken Distribution Center
ROG	Reactive Organic Gases
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SRA	Source Receptor Area

TAC	Toxic Air Contaminant
TIA	Traffic Impact Analysis
TOG	Total Organic Gases
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

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## EXECUTIVE SUMMARY

### 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 any criteria pollutants. Therefore, a less than significant impact would occur for Project-related construction-source emissions and no mitigation measures are required.

#### *LOCALIZED IMPACTS*

For localized emissions, the Project would not exceed the SCAQMD's localized significance threshold for any criteria pollutant. Therefore, a less than significant impact would occur and no mitigation measures are required.

Project construction-source emissions would not conflict with the applicable Air Quality Management Plan (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 exceed the numerical thresholds of significance established by the SCAQMD for emissions of NO<sub>x</sub>. Either Option A or Option B of Mitigation Measure (MM) AQ-1 is recommended to reduce NO<sub>x</sub> emissions to less than significant levels. After implementation of either Option A or Option B of MM AQ-1, Project operational-source emissions would not exceed the applicable SCAQMD thresholds for any criteria pollutant and a less than significant impact would occur.

#### *LOCALIZED IMPACTS*

For localized emissions, the Project would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutants. 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 (1). Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

## 1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the proposed S. Milliken Distribution Center (“Project”). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the proposed Project, and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the South Coast Air Quality Management District (SCAQMD).

### 1.1 SITE LOCATION

The proposed S. Milliken Distribution Center site is located north of SR-60 Freeway and east of Milliken Avenue in the City of Eastvale, as shown on Exhibit 1-A. State Route 60 (SR-60) Freeway is located approximately 300 feet south of the Project site and Interstate 15 (I-15) Freeway is located 0.25 miles east of the Project site.

### 1.2 STUDY AREA

The Project site is currently vacant and is designated by the City of Eastvale General Plan Land Use Map as Commercial Retail land use. (2) The properties adjacent to the Project site on the north side are designated as Light Industrial land use, the properties adjacent to the Project site on the south side are designated State Route 60 (SR 60) and Business Park land use, and properties adjacent to the Project site on the east side are designated as Commercial Retail land use.

### 1.3 PROJECT DESCRIPTION

The Project is proposed to consist of a total of 280,000 square feet of High-Cube Warehouse / Distribution Center use within a single building. The Project’s site plan is illustrated on Exhibit 1-B. The Project is anticipated to have an Opening Year of 2018.

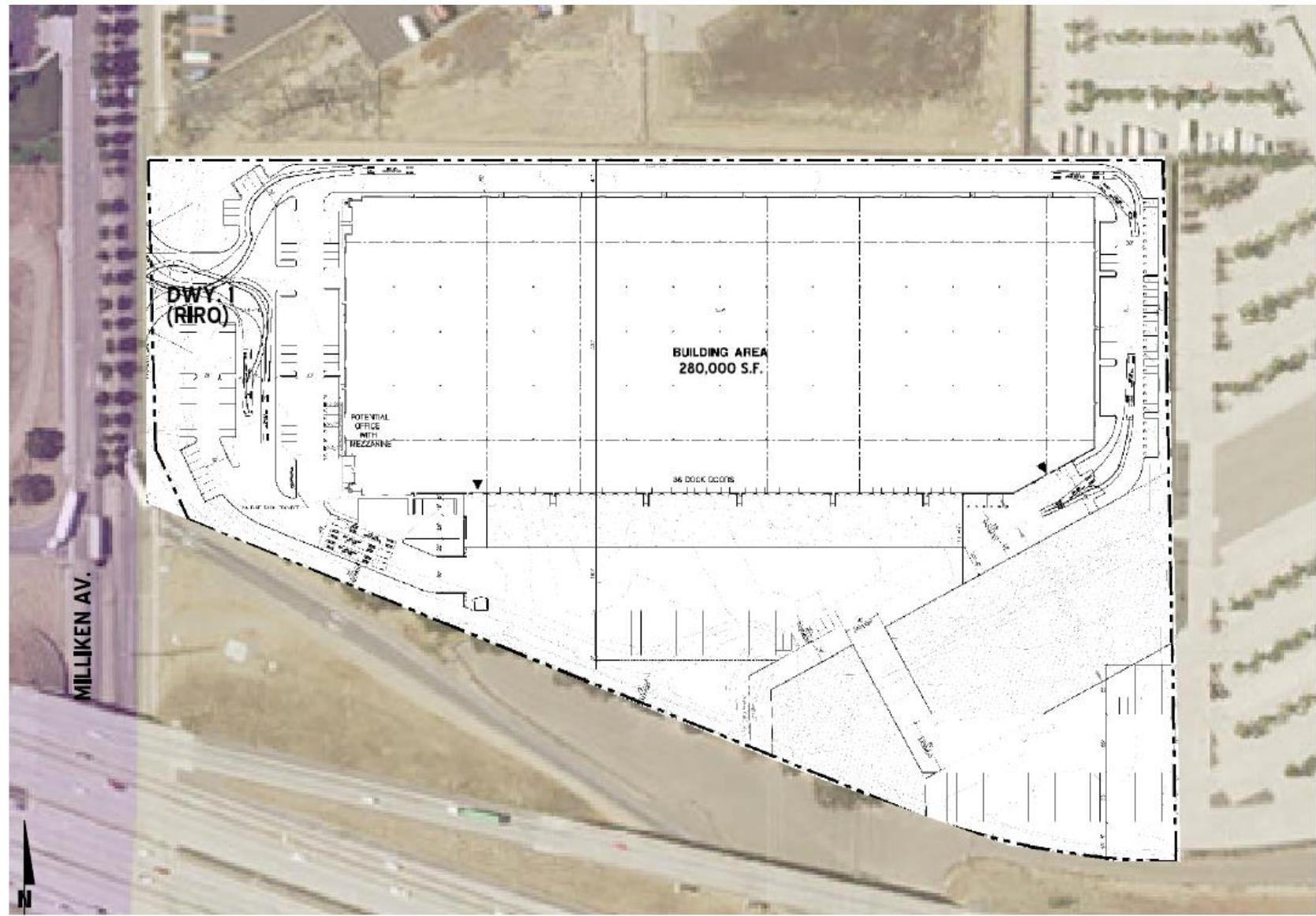
As part of the Project’s design, all on-site indoor and outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by non-combustion engines (e.g. electric). Since there are no exhaust emissions associated with the equipment, for purposes of the Project, emissions associated with yard trucks and forklifts are not included in the emissions totals.

Per the *S. Milliken Distribution Center Traffic Impact Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 470 trip-ends per day (actual vehicles) (3). The net Project trip generation includes 178 truck trip-ends per day. This air quality study relies on the net Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck emissions associated with the Project.

**EXHIBIT 1-A: LOCATION MAP**



**EXHIBIT 1-B: SITE PLAN**



## **1.3 CONSTRUCTION-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES**

### **1.3.1 MONITORING OF AND COMPLIANCE WITH STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMs)**

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

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (4); Rule 431.2 (Low Sulfur Fuel) (5); Rule 403 (Fugitive Dust) (6); and Rule 1186 / 1186.1 (Street Sweepers) (7). In order to facilitate monitoring and compliance, applicable SCAQMD regulatory requirements are summarized below.

#### **BACM AQ-1**

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 403.

- 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, with complete coverage of disturbed areas, at least three (3) times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less

#### **BACM AQ-2**

Only “Low-Volatile Organic Compounds” paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications 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, consistent with the California Code of Regulations. (8).

## **1.4 OPERATIONAL-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES**

#### **MM AQ-1**

In order to reduce the operational impacts associated with NOx emissions, the Project shall implement one of the following options:

- Option A: The Project shall limit the number of diesel-fueled trucks accessing the Project site to 134 trucks per day if the truck fleet is wholly or partially older than the 2009 U.S EPA/CARB truck engine standards.
- Option B: All diesel-fueled trucks accessing the Project site shall meet the U.S EPA/CARB truck engine standard for Model Year 2009 or better.

Pursuant to a phase-in schedule established by U.S. EPA/CARB, all heavy- and heavier-duty diesel-fueled trucks must have a 2010 Model Year engine or newer by 2023. Thus, the above measure shall be in effect on the Project until 2023. It is recommended that the above options be included as a condition of Project approval, and that the building user keep a truck log that would be available to the City or its designee upon request to verify compliance.

## 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 (9). 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 South Coast Air Basin, 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 bound 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 bound 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 bound 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 1/2 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 NOX 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 EXISTING AIR QUALITY**

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated and 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, as well health effects of each pollutant regulated under these standards are shown in Table 2-1 (10) (11).

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 O<sub>3</sub>, CO, SO<sub>2</sub>, NO<sub>2</sub>, PM10, and PM2.5 are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O<sub>3</sub>, PM10, PM2.5, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O<sub>3</sub> standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

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

Ambient Air Quality Standards									
Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>					
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>			
Ozone (O <sub>3</sub> ) <sup>8</sup>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry			
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )					
Respirable Particulate Matter (PM10) <sup>9</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		—					
Fine Particulate Matter (PM2.5) <sup>9</sup>	24 Hour	—	Gravimetric or Beta Attenuation	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>		12.0 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>				
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	—	Non-Dispersive Infrared Photometry (NDIR)			
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	—				
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		—	—				
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	100 ppb (188 µg/m <sup>3</sup> )	—	Gas Phase Chemiluminescence			
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )		0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard				
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)			
	3 Hour	—		—	0.5 ppm (1300 µg/m <sup>3</sup> )				
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>11</sup>	—				
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>11</sup>	—				
Lead <sup>12,13</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption			
	Calendar Quarter	—		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>	Same as Primary Standard				
	Rolling 3-Month Average	—		0.15 µg/m <sup>3</sup>					
Visibility Reducing Particles <sup>14</sup>	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards					
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography	National Standards					
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence						
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	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, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \mu\text{g}/\text{m}^3$  is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of  $25^\circ\text{C}$  and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of  $25^\circ\text{C}$  and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from  $15 \mu\text{g}/\text{m}^3$  to  $12.0 \mu\text{g}/\text{m}^3$ . The existing national 24-hour PM2.5 standards (primary and secondary) were retained at  $35 \mu\text{g}/\text{m}^3$ , as was the annual secondary standard of  $15 \mu\text{g}/\text{m}^3$ . The existing 24-hour PM10 standards (primary and secondary) of  $150 \mu\text{g}/\text{m}^3$  also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.  
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ( $1.5 \mu\text{g}/\text{m}^3$  as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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

California Air Resources Board (5/4/16)

## 2.5 REGIONAL AIR QUALITY

The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations throughout the air district. In 2015, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> at most monitoring locations (12). No areas of the SCAB exceeded federal or state standards for NO<sub>2</sub>, SO<sub>2</sub>, CO, sulfates or lead. See Table 2-2 for attainment designations for the SCAB (13). Appendix 3.2 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

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

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment
PM <sub>10</sub>	Nonattainment	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Unclassified/Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Lead <sup>1</sup>	Attainment	Unclassified/Attainment

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

Note: See Appendix 3.2 for a detailed map of State/National Area Designations within the South Coast Air Basin

## 2.6 LOCAL AIR QUALITY

Relative to the Project site, the nearest long-term air quality monitoring site for Carbon Monoxide (CO), Ozone (O<sub>3</sub>), Nitrogen Dioxide (NO<sub>2</sub>), Particulate Matter ≤ 10 Microns (PM<sub>10</sub>), and Particulate Matter ≤ 2.5 Microns (PM<sub>2.5</sub>) is the South Coast Air Quality Management District Central San Bernardino Valley 1 monitoring station (SRA 34), located approximately 6.8 miles northeast of the Project site (14).

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 was considered to be representative of the local air quality at the Project site (12) (15). Additionally, data for SO<sub>2</sub> has been omitted as attainment is regularly met in the South Coast Air Basin and few monitoring stations measure SO<sub>2</sub> concentrations.

<sup>1</sup> 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 2014-2016**

POLLUTANT	STANDARD	YEAR		
		2014	2015	2016
Ozone (O <sub>3</sub> )				
Maximum 1-Hour Concentration (ppm)		0.127	0.133	0.139
Maximum 8-Hour Concentration (ppm)		0.105	0.111	0.105
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	31	36	34
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	52	59	52
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	1	3	3
Number of Days Exceeding Federal 8-Hour Standard	> 0.07 ppm	52	57	49
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		3.0	2.8	1.7
Maximum 8-Hour Concentration (ppm)		1.2	1.2	1.0
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	0
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO <sub>2</sub> )				
Maximum 1-Hour Concentration (ppm)		0.070	0.089	0.072
Annual Arithmetic Mean Concentration (ppm)		0.020	0.019	0.032
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM <sub>10</sub> )				
Maximum 24-Hour Concentration (µg/m <sup>3</sup> )		68	96	94
Annual Arithmetic Mean (µg/m <sup>3</sup> )		39.7	37.8	38.1
Number of Samples		58	55	61
Number of Samples Exceeding State Standard	> 50 µg/m <sup>3</sup>	13	13	15
Number of Samples Exceeding Federal Standard	> 150 µg/m <sup>3</sup>	0	0	0
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )				
Maximum 24-Hour Concentration (µg/m <sup>3</sup> )		78.9	47.3	30.5
Annual Arithmetic Mean (µg/m <sup>3</sup> )		13.2	10.7	12.0
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	1	2	0

-- = data not available from SCAQMD or ARB

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 effects are identified below:

- 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 (SO<sub>2</sub>): 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 SO<sub>2</sub> oxidizes in the atmosphere, it forms sulfates (SO<sub>4</sub>). Collectively, these pollutants are referred to as sulfur oxides (SOX).
- Nitrogen Oxides (Oxides of Nitrogen, or NO<sub>x</sub>): Nitrogen oxides (NO<sub>x</sub>) consist of nitric oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O) and are formed when nitrogen (N<sub>2</sub>) combines with oxygen (O<sub>2</sub>). 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. NO<sub>2</sub> 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, NO<sub>2</sub> is the most abundant in the atmosphere. As ambient concentrations of NO<sub>2</sub> are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO<sub>2</sub> than those indicated by regional monitors.
- Ozone (O<sub>3</sub>): Is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), 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. 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. PM10 also causes visibility reduction and is a criteria air pollutant.
- PM2.5 (Particulate Matter less than 2.5 microns): A similar air pollutant 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<sub>2</sub> release from power plants and industrial facilities and nitrates that are formed from NO<sub>x</sub> 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. PM2.5 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<sub>3</sub>, 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. ROGs are a criteria pollutant since they are a precursor to O<sub>3</sub>, 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. 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. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. It should be noted that the Project is not anticipated to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant.

## 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 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 PM2.5) 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 PM2.5 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 PM2.5.

#### 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 NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub> 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 NO<sub>2</sub>.

#### Sulfur Dioxide

A few minutes of exposure to low levels of SO<sub>2</sub> 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 SO<sub>2</sub>. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO<sub>2</sub>.

Animal studies suggest that despite SO<sub>2</sub> 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 SO<sub>2</sub> levels. In these studies, efforts to separate the effects of SO<sub>2</sub> 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 cause 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.

## 2.7 REGULATORY BACKGROUND

### 2.7.1 FEDERAL REGULATIONS

The U.S. EPA is responsible for setting and enforcing the NAAQS for O<sub>3</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, PM10, and lead (10). 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 (16). 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<sub>3</sub>, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, CO, PM<sub>2.5</sub>, and lead. The NAAQS were amended in July 1997 to include an additional standard for O<sub>3</sub> and to adopt a NAAQS for PM<sub>2.5</sub>. 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 (NOx). NOx is a collective term that includes all forms of nitrogen oxides (NO, NO<sub>2</sub>, NO<sub>3</sub>) which are emitted as byproducts of the combustion process.

## **2.7.2 CALIFORNIA REGULATIONS**

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 (11) (10).

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 ROGs, NOx, 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.

### **2.7.3 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 3.8.

### **2.8 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 Basin. 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 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 Air Quality Management Plans (AQMPs) and by utilizing uniform CEQA review throughout the 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, NOx, 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, NOx and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NOx 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 PM2.5 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 PM2.5 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.

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.

As with other pollutants, the most recent PM10 statistics also show overall improvement as illustrated in Table 2-5. During the period for which data are available, the 24-hour national annual average decreased by almost 45 percent, from 103.7  $\mu\text{g}/\text{m}^3$  in 1989 to 57.6  $\mu\text{g}/\text{m}^3$  in 2014. Although the values in the late 1990's show some variability, this is probably due to meteorology rather than a change in emissions. Despite the overall decrease, ambient concentrations still exceed the State annual and 24-hour PM10 standards. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM10 standards has also shown an overall drop. During 1995, there were 25 calculated days above the national standard. By 2014, there was one calculated national standard exceedance days (21).

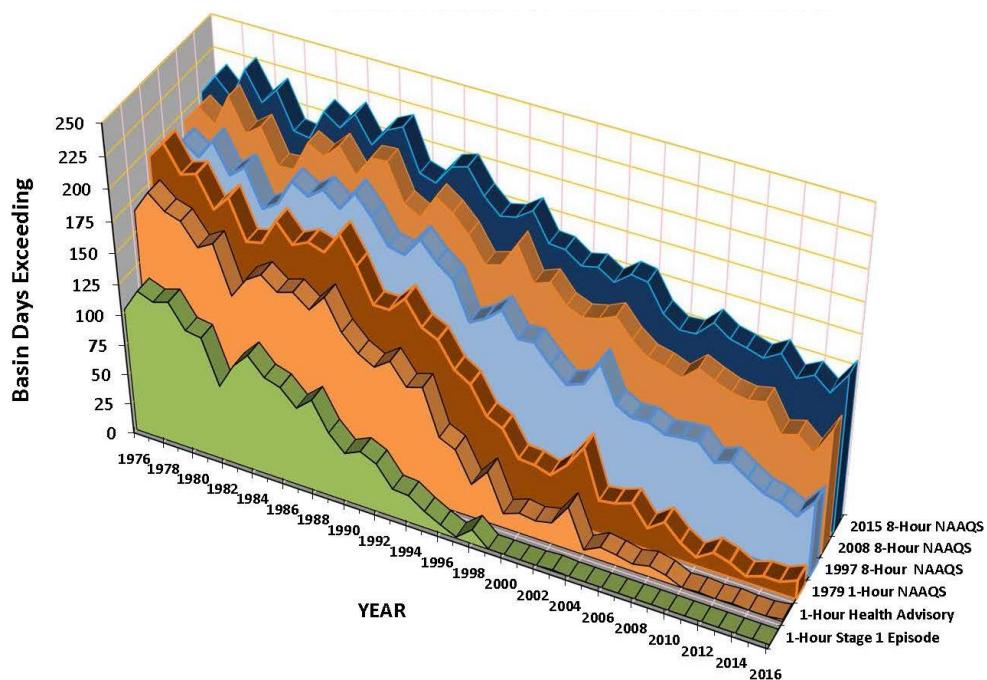
Table 2-6 shows the most recent 24-hour average PM<sub>2.5</sub> concentrations (national) in the SCAB from 1999 through 2014. Overall, the annual average concentrations have decreased by almost 52 percent. The calculated number of days above the national standard also decreased, from about 88 days in 1999 to about 9 days in 2014. The SCAB is currently designated as nonattainment for the State and national PM<sub>2.5</sub> standards. Measures adopted as part of the upcoming PM<sub>2.5</sub> SIP, as well as programs to reduce ozone and diesel PM will help in reducing public exposure to PM<sub>2.5</sub> in this region.

While the 2012 AQMP PM<sub>2.5</sub> 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<sub>2.5</sub>. The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of PM<sub>2.5</sub>- equivalent emission reductions continued through 2015, the severe drought conditions contributed to the PM<sub>2.5</sub> increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour PM<sub>2.5</sub> standard, SCAQMD

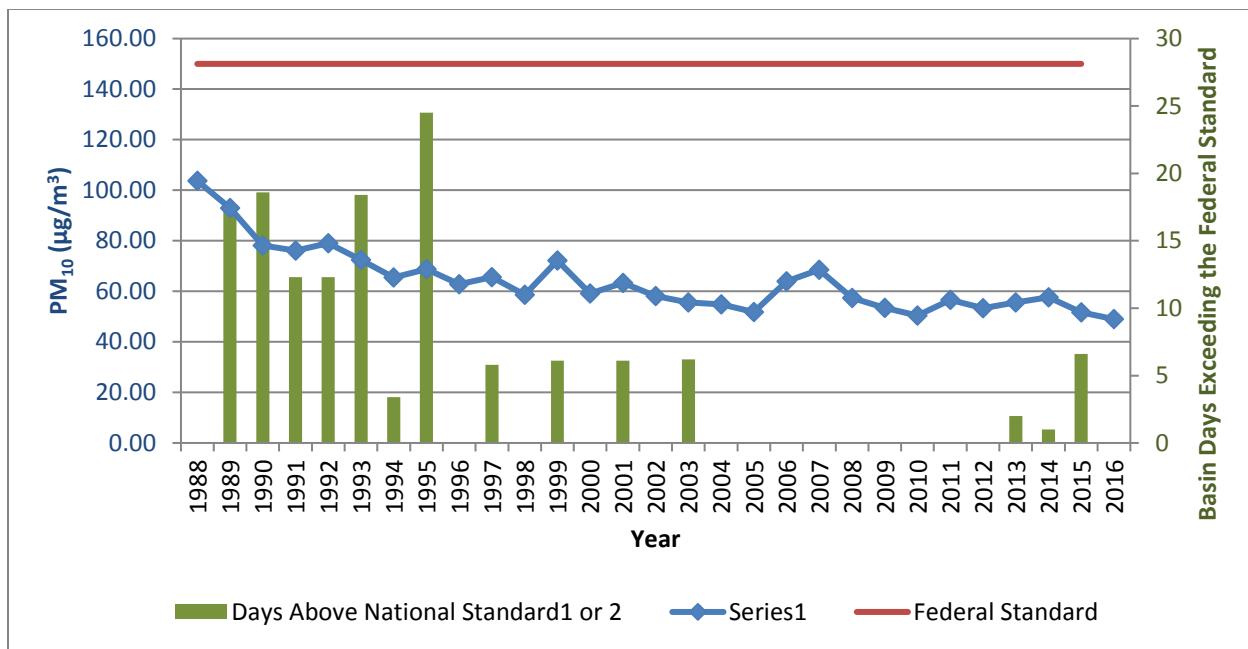
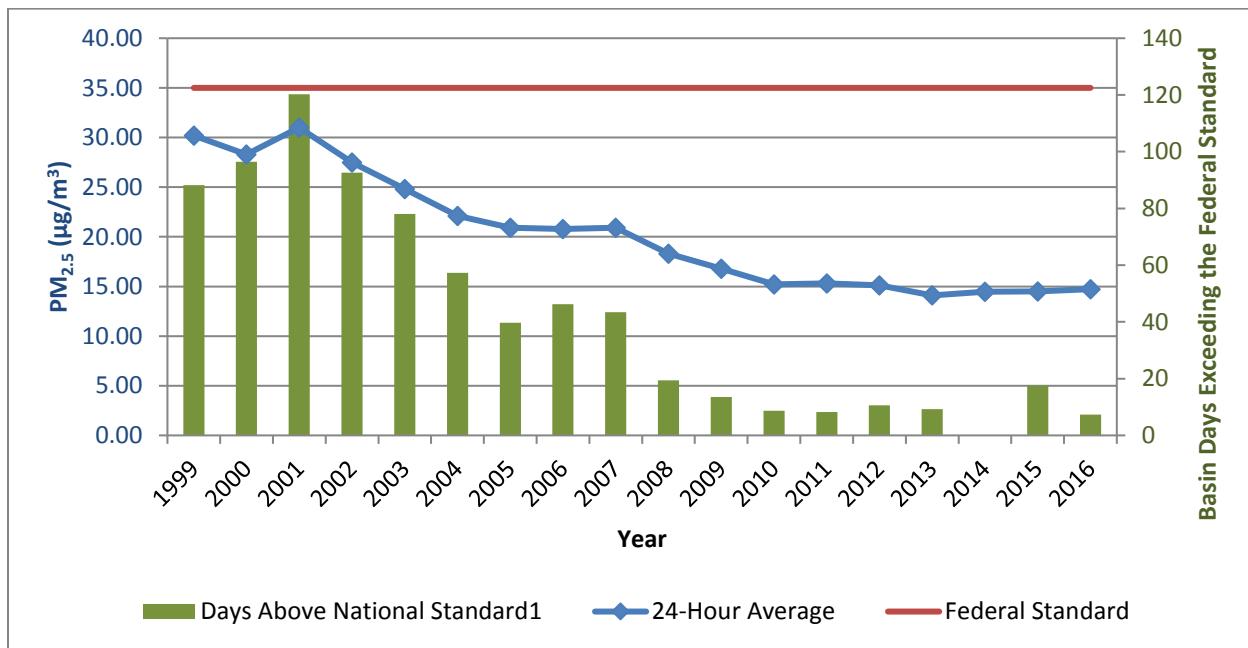
submitted a request and the U.S. EPA approved, in January 2016, a “bump up” to the nonattainment classification from “moderate” to “serious,” with a new attainment deadline as soon as practicable, but not beyond December 31, 2019.

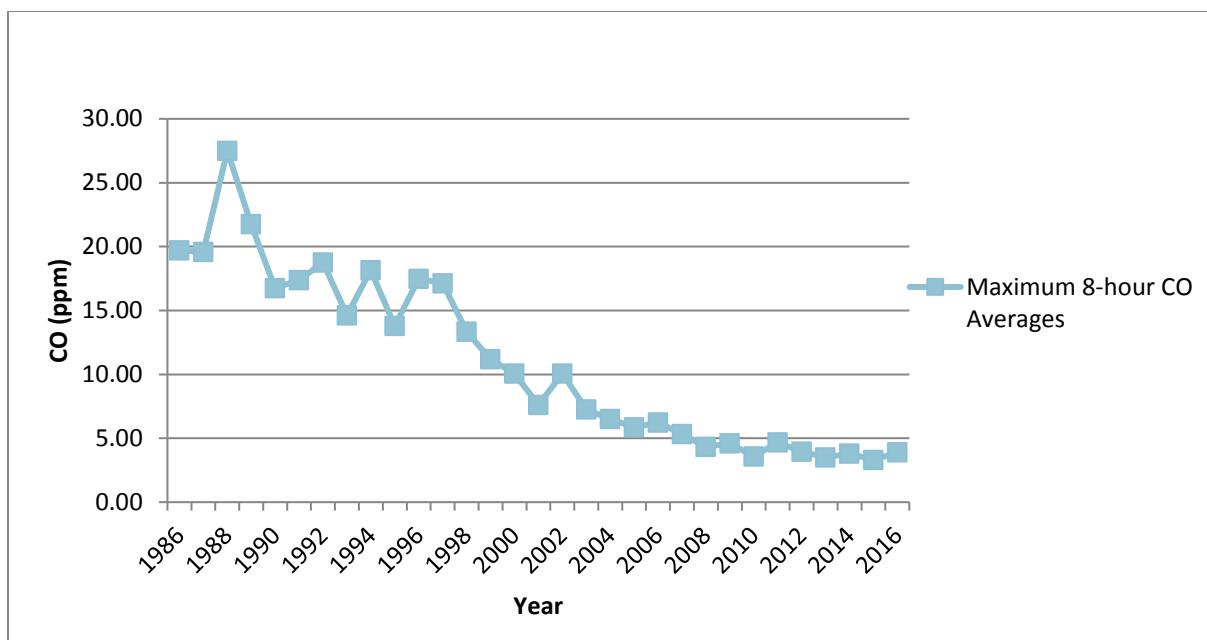
The most recent carbon dioxide concentrations in the SCAB 1986 are shown in Table 2-7 (22). Carbon monoxide concentrations in the SCAB have decreased markedly — a total decrease of more about 80 percent in the peak 8-hour concentration since 1986. The number of exceedance days has also declined. The 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 2-4: SOUTH COAST AIR BASIN OZONE TREND**



**TABLE 2-5: SOUTH COAST AIR BASIN PM<sub>10</sub> TREND**

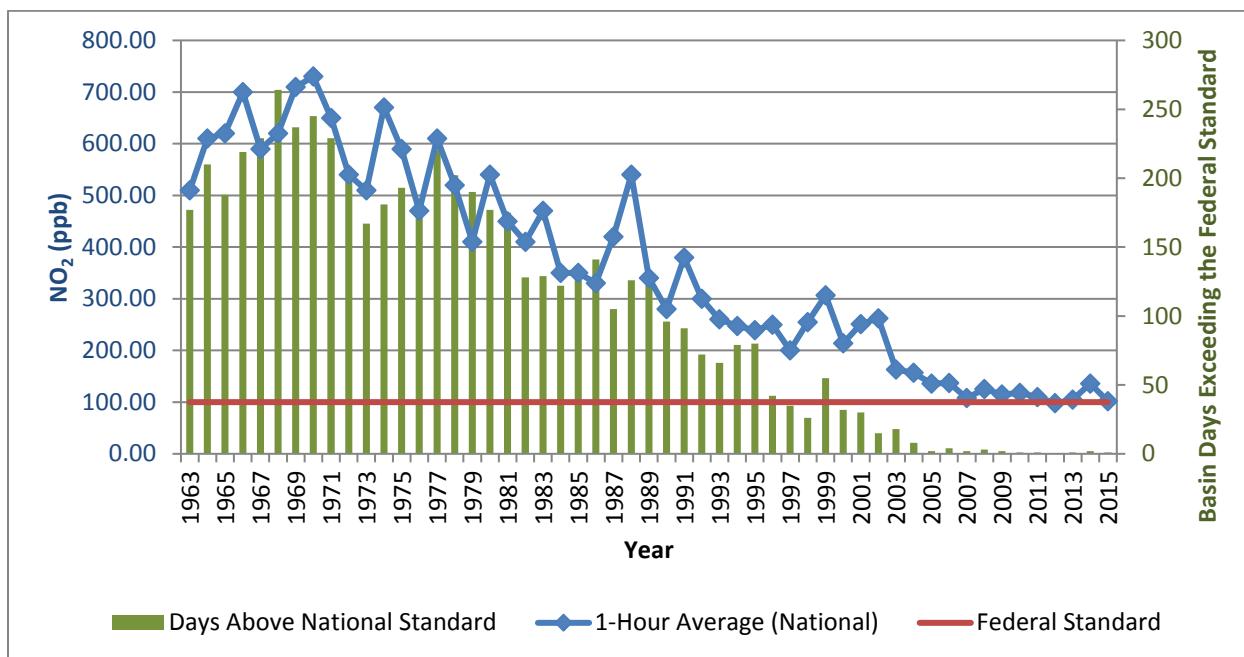
**TABLE 2-6: SOUTH COAST AIR BASIN PM<sub>2.5</sub> TREND****TABLE 2-7: SOUTH COAST AIR BASIN CARBON MONOXIDE TREND**



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 NO<sub>2</sub> data for the SCAB is shown in Table 2-8 (22). Over the last 50 years, NO<sub>2</sub> values have decreased significantly; the peak 1-hour average for 2013 was almost 74 percent lower than what it was during 1963. The SCAB attained the State 1-hour NO<sub>2</sub> 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. NO<sub>2</sub> is formed from NO<sub>x</sub> 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<sub>x</sub> emissions. These measures are expected to bring the South Coast into attainment of the State annual average standard.

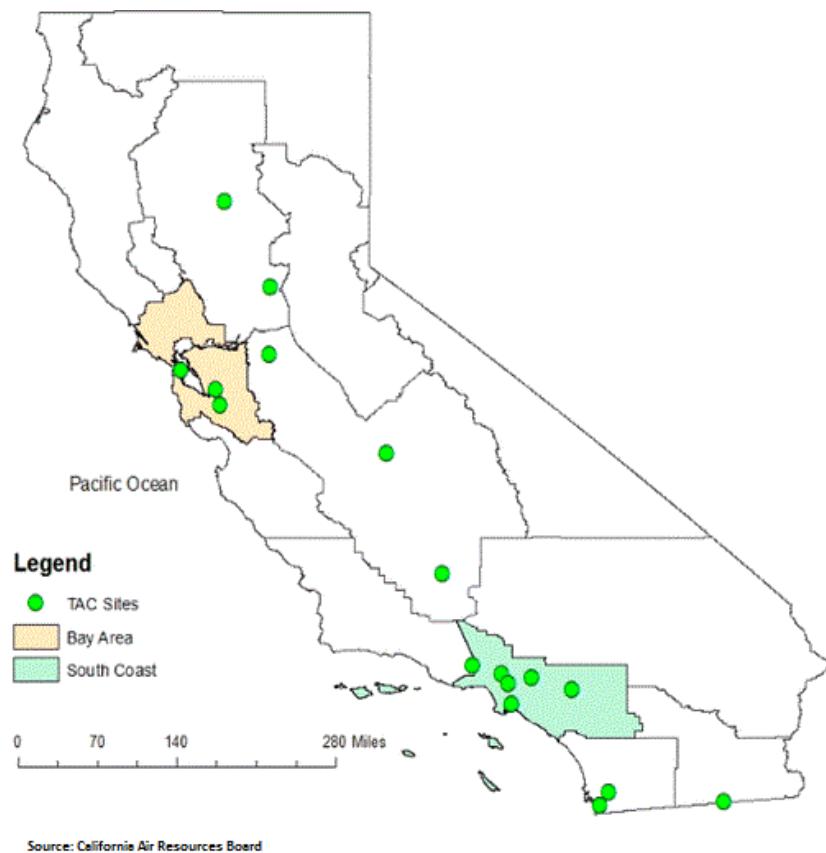
The American Lung Association website includes data collected from State air quality monitors that are used to compile an annual State of the Air report. The latest State of the Air Report compiled for the Basin was in 2015 (25). As noted in this report, air quality in the Basin has significantly improved 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 38% regionally in the initial 2000 State of the Air report (1996–1998) to 69% in the 2004 report. The region has also seen dramatic reduction in particle pollution since the initial 2000 State of the Air report (25).

**TABLE 2-8: SOUTH COAST AIR BASIN NITROGEN DIOXIDE TREND**

### 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 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 (26). The seven TACs studied shown below 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 acetaldehyde<sup>2</sup>. TACs data was gathered at monitoring sites from both the Bay Area and South Coast Air Basins, as shown on Exhibit 2-A; Several of the sites in the SCAB include Reseda, Compton, Rubidoux, Burbank, and Fontana. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

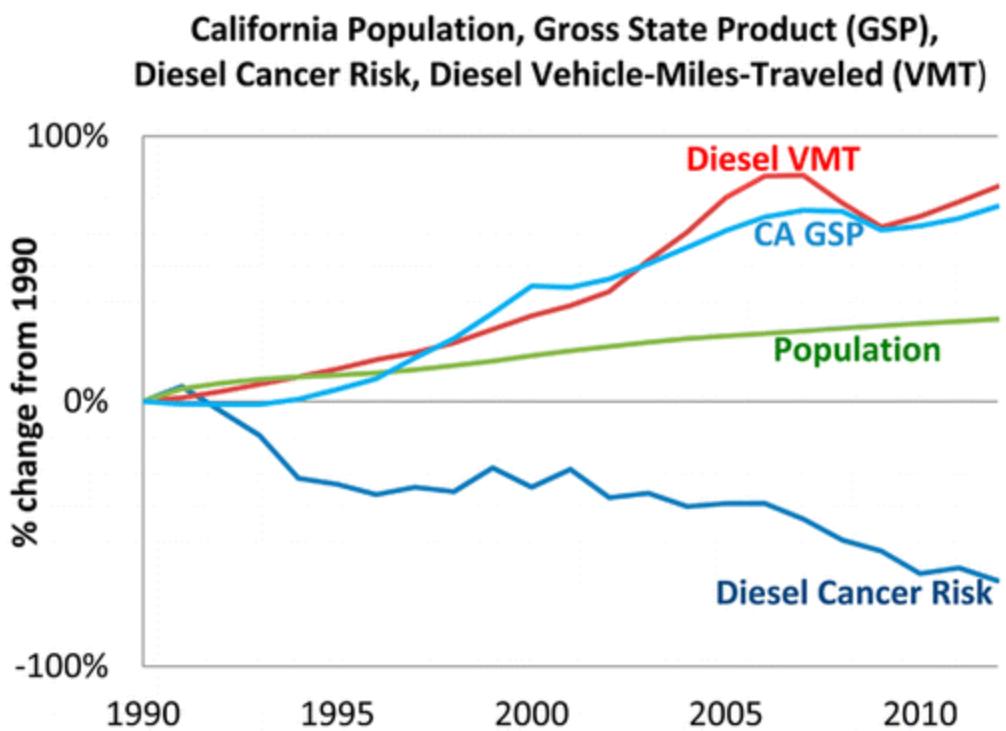
<sup>2</sup> It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

**EXHIBIT 2-A: CALIFORNIA TOXIC AIR CONTAMINANT SITES****Mobile Source TACs**

The CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. Since 1996, light-duty vehicles sold in California are equipped with California's second-generation On-Board Diagnostic (OBD-II) system as a result of about half of total car emissions stemming from emissions control device malfunctions. 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 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%, 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

#### Stationary Source TACs

Various regulations led to a decrease in perchloroethylene and hexavalent chromium, with a 92% and 86% decline, respectively. By 1993, several local air districts required dry cleaning businesses to use a carbon absorber and refrigerated condenser, as well as, dry-to-dry machines and closed-looped machines instead of vented transfer machines. Starting in 2003, California provided financial incentives for dry cleaners to use other solvents and soon after, the CARB banned the use of perchloroethylene in automotive products, aerosol coatings, and most consumer products. In 2007, CARB's dry cleaning regulation was amended to require phase-out of perchloroethylene machines by 2023, which would further reduce emissions to minimal levels (26).

Hexavalent chromium emissions began to decline in 1988 with the ARB-regulated regulations contributing to more than 97% emission reduction within four years. The various regulations include prohibiting the use of hexavalent chromium in cooling towers (1989), in motor vehicle and mobile equipment coatings (2001), and in thermal spraying operations (2005). By 2005, hexavalent chromium emissions were 99.97% less than in 1987, far exceeding expectations. In 2006, hexavalent chromium emissions were further reduced with the 2006 ARB regulation requiring add-on air pollution control devices and chemical fume suppressants.

#### Secondary TACs

Between 1996-2012, ambient concentrations of formaldehyde and acetaldehyde declined 22% and 21%, respectively. The decline in these TACs are attributed from increasingly stringent motor

vehicle exhaust emission standards, vehicle fleet turnover, fuel reformulation, and the switch from MTBE (formaldehyde precursor) to ethanol in gasoline (26).

As previously discussed, ambient and emissions levels of TACs have reduced significantly from 1990-2012. The overall declining trend in TACs is expected to continue in California from implementation of toxic air controls.

#### DIESEL REGULATIONS

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter (DPM). More specifically, the CARB Drayage Truck Regulation (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 (HHDT), in terms of grams of DPM generated per mile traveled, will dramatically be reduced due to the aforementioned regulatory requirements.

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

#### CANCER RISK TRENDS

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

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

Nonetheless, the SCAQMD’s most recent in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California was from the *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV*, which shows that cancer risk has decreased more than 55% between MATES III (2005) and MATES IV (2012) (25).

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 South Coast Air Basin (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 486.04 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.

## **2.9 EXISTING PROJECT SITE AIR QUALITY CONDITIONS**

The Project site is currently vacant and as such, existing air quality conditions at the Project site would generally reflect ambient monitored conditions previously presented previously at Table 2-3.

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## 3 PROJECT AIR QUALITY IMPACT

### 3.1 INTRODUCTION

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

### 3.2 STANDARDS OF SIGNIFICANCE

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized at Table 3-1 (30). 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<sup>A</sup>**

Pollutant	Construction	Operations
<b>Regional Thresholds</b>		
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
Sox	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
<b>Localized Thresholds</b>		
NOx	311 lbs/day	348 lbs/day
CO	3,038 lbs/day	3,444 lbs/day
PM10	49 lbs/day	14 lbs/day
PM2.5	13 lbs/day	4 lbs/day

<sup>A</sup>: Based on SCAQMD Air Quality Significance Thresholds, March 2015

### 3.3 CALIFORNIA EMISSIONS ESTIMATOR MODEL™ EMPLOYED TO ESTIMATE AQ EMISSIONS

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

On October 2, 2013, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) released the California Emissions Estimator Model™ (CalEEMod™) v2016.3.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NO<sub>x</sub>, VOC, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (31). Accordingly, 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.

### **3.4 CONSTRUCTION EMISSIONS**

Construction activities associated with the Project will result in emissions of CO, VOCs, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Construction related emissions are expected from the following construction activities:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating
- Construction Workers Commuting

Construction is expected to commence in October 2017 and will last through January 2018. The duration of construction activity was estimated based on information provided by the Project applicant and a 2018 opening year. The construction schedule utilized in the analysis, shown in Table 3-1, represents a “worst-case” analysis scenario; should construction commence later than October 2017 through January 2018; emissions would be less than reported herein because emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.<sup>3</sup> A detailed summary of the construction schedule, shown in Table 3-2, was estimated based on information provided by the Project applicant. The site-specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated equipment both represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Please refer to specific detailed modeling inputs/outputs contained in Appendix 3.1 of this analysis.

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. Based on information provided from the Project’s engineer, it is our

<sup>3</sup> As shown in the California Emissions Estimator Model (CalEEMod) User’s Guide Version 2016.3, Table 3.4 “OFFROAD Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

understanding the Project's would require approximately 27,750 cubic yards of excavation and that the site would balance.

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.

#### **OFF-SITE UTILITY AND INFRASTRUCTURE IMPROVEMENTS**

Construction emissions associated with off-site utility and infrastructure improvements may occur, however at this time, a specific schedule of off-site utility and infrastructure improvements is unknown. However, impacts associated with these expected activities are not expected to exceed the maximum daily emissions identified for other Project-related construction activities. As such, no impacts beyond what has already been identified in this report are expected to occur.

**TABLE 3-2: CONSTRUCTION DURATION**

Phase Name	Start Date	End Date	Days
Site Preparation	10/01/2017	10/13/2017	10
Grading	10/14/2017	11/24/2017	30
Building Construction	11/25/2017	10/26/2017	240
Paving	10/27/2018	11/23/2017	20
Architectural Coating	11/24/2018	12/21/2018	20

**TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS**

<b>Activity</b>	<b>Equipment</b>	<b>Number</b>	<b>Hours Per Day</b>
Site Preparation	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozer	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractor/Loaders/Backhoes	3	8
	Welders	1	8
Paving	Pavers	2	8
	Paver Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

### **3.4.1 CONSTRUCTION EMISSIONS SUMMARY**

Impacts without mitigation assume compliance with applicable SCAQMD Rules. The SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (4); Rule 431.2 (Low Sulfur Fuel) (5); Rule 403 (Fugitive Dust) (6); and Rule 1186 / 1186.1 (Street Sweepers) (7). As such, credit for Rule 1113 (BACM AQ-2) and Rule 403(BACM AQ-1) have been taken.

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 any criteria pollutant.

**TABLE 3-4: MAXIMUM DAILY PEAK CONSTRUCTION EMISSIONS SUMMARY**

Year	Emissions (pounds per day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2017	6.63	80.47	40.63	0.0739	11.45	7.12
2018	66.65	34.88	29.66	0.0687	4.24	2.27
<b>Maximum Daily Emissions</b>	<b>66.65</b>	<b>80.47</b>	<b>40.63</b>	<b>0.0739</b>	<b>11.45</b>	<b>7.12</b>
SCAQMD Regional Threshold	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

## 3.5 OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project will result in emissions of VOC, NOX, CO, SOX, PM10, and PM2.5. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-Site Equipment 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 mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project. Trip characteristics available from the report, S. Milliken Distribution Center Traffic Impact Analysis (Urban Crossroads) 2017 were utilized in this analysis (3). Per the *S. Milliken Distribution Center Traffic Impact Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a net total of approximately 470 trip-ends per day (actual vehicles). The net Project trip generation includes 178 truck trip-ends per day. This air quality study relies on the net Project trips (as opposed to the passenger car equivalents) to accurately account for the effect of individual truck emissions associated with the Project.

The SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with their truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in effort to be consistent with other technical studies being prepared for the Project. The percentage of trucks has been determined from the table shown on page 267 of the ITE *Trip Generation* manual. As shown on page 267, the truck trip generation rate for weekday daily traffic is 0.64 or 38.1% of the total traffic. Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks. For the purposes of this analysis, the percentage of trucks, by axle type, were obtained from the SCAQMD interim recommended truck mix. The SCAQMD has recently performed surveys of existing facilities and compiled the data to provide interim guidance on the mix of heavy trucks for these types of high-cube warehousing/distribution facilities. Based on this interim guidance from the SCAQMD, the following truck fleet mix was utilized for the purposes of estimating the truck trip generation for the site: 22.03% of the total trucks as 2-axle trucks, 17.76% of the total trucks as 3-axle trucks, and 60.31% of the total trucks as 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 x average trip length. 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 S. Milliken Distribution Center 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 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 (32). 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. The SCAQMD asserts that for warehouse, distribution center, and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles (POLA and POLB) and/or to destinations outside of California. The SCAQMD states that for this reason, the CalEEMod™ and the URBan EMISSIONs 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.

#### Southern California Association of Government (SCAG) Heavy Duty Truck Model

SCAG is comprised of six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 190 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.

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.

## Approach for Analysis of the Project

Trip lengths and VMT estimates employed in this AQIA report generate vehicular-source emissions that would represent a maximum impact scenario. Other Environmental Impact Reports (EIRs) for similar land use projects within the region have utilized these same or similar estimates. Though the VMT analyzed in this analysis may differ from the Project's traffic impact analysis, to maintain analytic consistency and establish the maximum impact scenario noted above, the following approach has been utilized in calculating emissions associated with vehicles accessing the Project. This approach is consistent with professional industry practice (33) (34) (35).

For passenger car trips, the CalEEMod default for a one-way trip length of 16.6 miles was assumed. For heavy duty trucks, the SCAQMD recommendation of a 40.0 mile one-way trip length was assumed.

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 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. A fleet mix of 22.03% LHD, 17.66% MHD, and 60.31% HHD was used for High-Cube Warehouse. The estimated emissions resulting from vehicle operations are summarized in Table 3-7 (presented later in this report.) Detailed emission calculations are provided in Appendix 3.2.

### 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 tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod model.

#### **3.5.4 ON-SITE EQUIPMENT EMISSIONS**

As part of the Project's design, all on-site indoor and outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by non-combustion engines (e.g. electric). Since there are no exhaust emissions associated with the equipment, for purposes of the Project, emissions associated with yard trucks and forklifts are not included in the emissions totals.

#### **3.5.5 OPERATIONAL EMISSIONS SUMMARY**

##### ***Impacts Without Mitigation***

Operational-source emissions without implementation of mitigation measures are summarized on Table 3-6. As indicated, the Project would exceed regional thresholds of significance established by the SCAQMD for emissions of NO<sub>x</sub>.

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

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	2.40	66.19	17.41	0.202	6.51	2.20
Mobile (Passenger Cars)	0.804	1.66	23.72	0.0784	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>9.55</b>	<b>68.00</b>	<b>41.33</b>	<b>0.281</b>	<b>14.83</b>	<b>04.45</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	YES	NO	NO	NO	NO
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	2.43	68.03	17.90	0.201	6.51	2.21
Mobile (Passenger Cars)	0.745	1.81	20.82	0.0731	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>9.52</b>	<b>69.99</b>	<b>38.92</b>	<b>0.275</b>	<b>14.83</b>	<b>04.46</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	NO	YES	NO	NO	NO	NO

### **Impacts With Mitigation Measures**

Operational-source emissions with implementation of mitigation measures are summarized on Tables 3-7 and 3-8. MM AQ-1 Option A and Option B are recommended to reduce the NOx impacts to less than significant levels. After implementation of either Option A or Option B of MM AQ-1, Project operational-source emissions would not exceed the applicable SCAQMD thresholds for any criteria pollutant and a less than significant impact would occur.

**TABLE 3-7: SUMMARY OF OPERATIONAL EMISSIONS (WITH MITIGATION OPTION A)**

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	1.80	49.65	13.06	0.15	4.88	1.65
Mobile (Passenger Cars)	0.804	1.66	23.72	0.0784	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>8.95</b>	<b>51.46</b>	<b>36.98</b>	<b>0.23</b>	<b>13.20</b>	<b>3.90</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	1.82	51.03	13.43	0.15	4.89	1.65
Mobile (Passenger Cars)	0.745	1.81	20.82	0.0731	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>8.91</b>	<b>52.99</b>	<b>34.45</b>	<b>0.22</b>	<b>13.21</b>	<b>3.90</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

**TABLE 3-8: SUMMARY OF OPERATIONAL EMISSIONS (WITH MITIGATION OPTION B)**

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	2.40	43.30	17.41	0.202	6.51	2.20
Mobile (Passenger Cars)	0.804	1.66	23.72	0.0784	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>9.55</b>	<b>45.11</b>	<b>41.33</b>	<b>0.28</b>	<b>14.83</b>	<b>4.45</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area Source	6.33	6.70E-04	0.0714	1.00E-05	2.60E-04	2.60E-04
Energy Source	0.0170	0.154	0.130	9.30E-04	0.0117	0.0117
Mobile (Trucks)	2.43	44.13	17.90	0.200	6.51	2.20
Mobile (Passenger Cars)	0.745	1.81	20.82	0.0731	8.31	2.24
<b>Total Maximum Daily Emissions</b>	<b>9.52</b>	<b>46.09</b>	<b>38.92</b>	<b>0.27</b>	<b>14.83</b>	<b>4.45</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

### **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) (36). 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 NO<sub>2</sub>, 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 PM2.5; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4<sup>4</sup>. 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) (37).

#### **APPLICABILITY OF LSTs FOR THE PROJECT**

For this Project, the appropriate Source Receptor Area (SRA) for the LST analysis is the Central San Bernardino Valley 1 monitoring station (SRA 34). LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), particulate matter  $\leq$  10 microns (PM10), and particulate matter  $\leq$  2.5 microns (PM2.5). The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

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

- CalEEMod is utilized to determine the maximum daily on-site emissions that will occur during construction activity.

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<sup>4</sup> 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."

- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (38) is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to five acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than five acres per day (as is the case with the Project), then LST impacts are appropriately evaluated through dispersion modeling.

#### **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 (39)." Therefore, for purposes of the construction LST analysis only emissions included in the CalEEMod "on-site" emissions outputs were considered.

#### **MAXIMUM DAILY DISTURBED-ACREAGE**

Table 3-8 is used to determine the maximum daily disturbed-acreage during site grading for purposes of modeling localized emissions. Based on Table 3-8, the proposed Project could actively disturb approximately 3.5 acres per day during the site preparation phase and 4.0 acres per day during the grading phase of construction.

**TABLE 3-8 : MAXIMUM DAILY DISTURBED-ACREAGE**

Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Site Preparation	Rubber Tired Dozers	3	0.5	8	1.5
	Crawler Tractors	4	0.5	8	2.0
	Graders	0	0.5	8	0
	Scrapers	0	1	8	0
Total acres graded per day during Site Preparation					3.5
Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Grading	Rubber Tired Dozers	1	0.5	8	0.5
	Crawler Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Scrapers	2	1	8	2
Total acres graded per day during Grading					4.0

### ***Sensitive Receptors***

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

Sensitive receptors in the vicinity of the Project site are located at receptor locations R1 to R4, and include the single-family residential dwellings, Creek View Elementary School, and Assembly Hall of Jehovah’s Witnesses within the Project area. The nearest sensitive receptor is represented by location R4, which is the Assembly Hall of Jehovah’s Witnesses located approximately 80 meters/262 feet northeast of the Project site.

Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. To assess the stationary source operational and construction air impacts, the following 4 sensitive receptor locations, as shown on Exhibit 3-A, were identified.

- R1: Located approximately 2,608 feet southwest of the Project site, R1 represents an existing school, Creek View Elementary School.
- R2: Location R2 represents existing residential homes located roughly 1,467 feet southwest of the Project site on Klamath River Drive.
- R3: Location R3 represents an existing winery situated southwest of the Project site at a distance of approximately 1,020 feet on Hartford Street.
- R4: Location R4 represents the existing church located at a distance of approximately 262 feet northeast of the Project site, south of Mission Boulevard.

### **CONSTRUCTION-SOURCE EMISSIONS LST ANALYSIS**

Since the total acreage disturbed is less than five acres per day for the grading phase of construction, the SCAQMD’s screening look-up tables are utilized in determining impacts. As previously noted, an 80-meter receptor distance is utilized to determine the LSTs for emissions of CO, NO<sub>2</sub>, PM10, and PM2.5.

Table 3-9 identifies the localized impacts at the nearest receptor location in the vicinity of the Project. Outputs from the model runs for construction LSTs are provided in Appendix 3.3. It should be noted that credit for BACMs AQ-1 and AQ-2 has been taken. As shown, localized construction emissions would not exceed the applicable SCAQMD LSTs for any criteria pollutants. Therefore, a less than significant impact is expected.

## EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS



## LEGEND:

● Receptor Locations    —● Distance from receptor to Project site boundary (in feet)

**TABLE 3-9: LOCALIZED SIGNIFICANCE SUMMARY OF CONSTRUCTION**

On-Site Site Preparation Emissions	Emissions (pounds per day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Maximum Daily Emissions</b>	<b>77.14</b>	<b>25.08</b>	<b>11.25</b>	<b>7.07</b>
SCAQMD Localized Threshold	293	2,836	45	12
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
On-Site Grading Emissions	Emissions (pounds per day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Maximum Daily Emissions</b>	<b>80.37</b>	<b>39.60</b>	<b>7.12</b>	<b>4.50</b>
SCAQMD Localized Threshold	311	3,038	49	13
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

### 3.7 LOCALIZED SIGNIFICANCE – LONG-TERM OPERATIONAL ACTIVITY

Table 3-10 shows the calculated emissions for the Project's operational activities compared with the applicable LSTs. The LST analysis includes on-site sources only; however, the CalEEMod™ model outputs do not separate on-site and off-site emissions from mobile sources. In an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 3-10 represent all on-site Project-related stationary (area) sources and five percent (5%) of the Project-related mobile sources. Considering that the weighted trip length used in CalEEMod™ for the Project is approximately 16.6 miles for passenger cars and 40.0 miles for trucks, 5% of this total would represent an on-site travel distance of approximately 0.83 mile/ 4,383 feet for each passenger car and approximately 2.0 miles/ 10,560 feet for each truck. 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.

As noted previously, the nearest sensitive receptor land use (where an individual could remain for 24 hours) is located approximately 80 meters northeast of the Project site. Accordingly, LSTs for receptors at 80 meters are utilized in this analysis and provide for a conservative i.e. "health protective" standard of care.

#### LOCALIZED THRESHOLDS FOR OPERATIONAL ACTIVITY

Applicable localized thresholds from the SCAQMD's mass-rate LST lookup tables for a five-acre project site are as follows and represent a conservative estimate of LST impacts during operations:

- NO<sub>x</sub>: 348 pounds per day;
- PM<sub>10</sub>: 14 pounds per day;
- PM<sub>2.5</sub>: 4 pounds per day; or
- CO: 3,444 pounds per day.

If emissions exceed the applicable LSTs for the Project site, then additional dispersion modeling needs to be conducted to determine if there is an actual exceedance of the AAQS.

#### ***Impacts Without Mitigation***

As shown on Table 3-10, operation emissions would not exceed the LST thresholds for the nearest sensitive receptor.

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

On-Site Operation Emissions	Emissions (pounds per day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Maximum Daily Emissions	3.49	1.94	0.74	0.22
SCAQMD Localized Threshold	348	3,444	4	4
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 (40).

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 2-2. 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.

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 (40). 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.

Traffic volumes generating the CO concentrations for the “hot spot” analysis, shown on Table 3-13. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations ( $4.6 \text{ ppm} \times 4 = 18.4 \text{ ppm}$ ) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).<sup>5</sup> At buildout of the Project, the highest average daily trips on a segment of road would be 44,783 daily trips on Haven Avenue south of Mission Boulevard which is lower than the highest daily traffic volumes generated at the busiest intersection in the CO “hot spot” analysis (3).

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, as shown on Table 3-14. Therefore, CO “hot spots” are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

**TABLE 3-12: CO MODEL RESULTS**

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

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

**TABLE 3-13: TRAFFIC VOLUMES FOR INTERSECTIONS EVALUATED IN AQMP**

Intersection Location	Peak Traffic Volumes (vph)				
	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

**TABLE 3-14: PROJECT STUDY AREA 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)
Haven Av. / Mission Bl.	1,787/1,752	1,518/2,471	581/1,285	1,003/608	4,889/6,116
Milliken Av. / Jurupa St.	1,046/1,218	646/1,145	546/1,333	1,407/1,070	3,644/4,767
Milliken Av. / Driveway 1	1,472/766	524/1,506	0/0	14/35	2,010/2,307
Milliken Av. / SR-60 Westbound Ramps	1,213/983	524/1,506	0/0	848/316	2,585/2,805

Source: S. Milliken Distribution Center Traffic Impact Analysis (Urban Crossroads, Inc., 2017).

### 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 (41). 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 (42). 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) (23). 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. 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 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 2012 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of Eastvale General Plan Update 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 City of Eastvale's General Plan Land Use designation for the Project site is Commercial Retail, which allows for "the development of commercial retail uses at a neighborhood, community, and regional level, as well as for professional office and visitor-oriented commercial uses (2)." The

Project is proposed to consist of 280,000 square-feet of high-cube warehouse use, which has a lower daily vehicle trip rate per square foot of building space than does commercial retail uses. As such, although the development proposed by the Project would change the existing land use designation from commercial retail to industrial, substantial differences are not expected in air quality emissions with development of the site with one high cube warehouse as proposed by the Project. Notwithstanding, as previously evaluated, the Project would not exceed any of the applicable regional emissions thresholds. On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

#### **AQMP Consistency Conclusion**

The Project would not result in or cause NAAQS or CAAQS violations. Although the proposed Project intensifies the density in the adopted General Plan, the Project would not exceed any applicable regional or local thresholds. As such, the Project is considered to be consistent with the AQMP and a less than significant impact would occur.

### **3.10 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS**

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

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

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO “hotspot.” Therefore sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

### **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 commercial refuse. Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, 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 (1).

### **3.12 CUMULATIVE IMPACTS**

The Project area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

The AQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (43). 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.

#### **CRITERION 1; REGIONAL ANALYSIS**

##### Construction Impacts

Project construction-source air pollutant emissions would not exceed the SCAQMD regional thresholds for any criteria pollutant. Therefore, the Project would not result in a cumulatively considerable significant impact with respect to construction activity.

##### Operational Impacts

Project operational-source air pollutant emissions would not exceed the SCAQMD regional thresholds for any criteria pollutant (after mitigation). Therefore, the Project would not result in a cumulatively considerable significant impact with respect to operational activity.

## **CRITERION 2; LIST APPROACH**

A list approach is used, in accordance with Section 15130(b) of the CEQA Guidelines, which states the following:

*The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.*

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.

The cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Eastvale. As shown on Table 3-14, the cumulative project list includes known and foreseeable projects that are anticipated to contribute emissions to the air basin in the vicinity of the Project.

Cumulative projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM10, and PM2.5. As previously noted, the Project would not result in any emissions exceedances over the applicable SCAQMD regional thresholds. As such, the Project would not result in a cumulatively considerable significant impact.

**TABLE 3-14: CUMULATIVE DEVELOPMENT LIST**

<b>TAZ</b>	<b>Project Name</b>	<b>Land Use<sup>1</sup></b>	<b>Quantity</b>	<b>Units<sup>2</sup></b>
1	14-1077 - Grainger Site	Industrial	546.000	TSF
2	The Campus	Business Park	776.000	TSF
3	11-0271 - Eastvale Commerce Center (Goodman Commerce Center)	Shopping Center	399.782	TSF
		High-Cube Warehouse	2,040.897	TSF
		Costco	158.000	TSF
		Business Park	191.356	TSF
4	11-0354 - Chevron Gas Station	Gas Station w/ convenience store and car wash	18.000	VFP
5	17-0038 - The Marketplace at Enclave (Dialysis Center)	Medical Office Building	40.000	TSF
6	12-0051 - Eastvale Shopping Center	Free-Standing Discount Superstore	177.719	TSF
		Specialty Retail	9.200	TSF
		Fast-Food Without Drive-Thru	7.200	TSF
		Coffee/Donut Shop w/ Drive Thru	2.000	TSF
		Fast-Food with Drive-Thru	3.500	TSF
		Gas Station w/ convenience store and car wash	16	VFP
7	13-1601 - 99 Cents Only	Discount Store	19.104	TSF
8	15-0783 - The Ranch	Warehousing	985.000	TSF
9	14-1398 - Sendero Planned Residential Development	SFDR	323	TSF
10	15-0958 - Eastvale Marketplace	Shopping Center	72.779	TSF
11	Leal Master Plan	Lifestyle Center (Commercial)	1,300.000	TSF
		General Commercial	225.000	TSF
		Office	920.000	TSF
		Hotel	450	Room
		Civic Center		TSF
		Medium Density Residential		DU
		High Density Residential	500-660	DU
12	15-1174 - Vantage Point Church	Church	85.000	TSF
13	PM35751	Condo/Townhouse	243	DU
14	13-0632 - Sumner Residential	SFDR	129	DU
15	14-0046 - Kasbergen/William Lyons Homes	Condo/Townhouse	220	DU
16	10-0124 - The Lodge	Condo/Townhouse	12	DU
17	15-1508 - Industrial Warehouse	Warehousing	155.000	TSF
18	Polopolus-Lewis	Civic Center	50.000	TSF
		Hotel	150	Room
		Commercial	65.340	TSF
19	Van Leeuwn General Plan Amendment	SFDR	224	DU

<sup>1</sup> SFDR = Single Family Detached Residential<sup>2</sup> DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

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## 4 FINDINGS & CONCLUSIONS

### CONSTRUCTION-SOURCE EMISSIONS

#### *REGIONAL IMPACTS*

For regional emissions, the Project would not exceed the numerical thresholds of significance established by the SCAQMD for any criteria pollutants. Therefore, a less than significant impact would occur for Project-related construction-source emissions.

#### *LOCALIZED IMPACTS*

For localized emissions, the Project would not exceed the SCAQMD's localized significance threshold 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 exceed the numerical thresholds of significance established by the SCAQMD for emissions of NOx. Either Option A or Option B of MM AQ-1 is recommended to reduce NOx emissions to less than significant levels. After implementation of either Option A or Option B of MM AQ-1, Project operational-source emissions would not exceed the applicable SCAQMD thresholds for any criteria pollutant and a less than significant impact would occur.

#### *LOCALIZED IMPACTS*

For localized emissions, the Project would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutants. 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 (1). Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

## 5 REFERENCES

1. **South Coast Air Quality Management District.** RULE 402. Nuisance. [Online] May 7, 1976. [Cited: November 13, 2013.] <http://www.aqmd.gov/rules/reg/reg04/r402.pdf>.
2. **City of Eastvale.** General Plan Map. [Online] July 2015. <http://www.eastvaleca.gov/home/showdocument?id=3898>.
3. **Urban Crossroads.** *S. Milliken Distribution Center Traffic Impact Analysis*. Costa Mesa : s.n., 2017.
4. **South Coast Air Quality Management District.** RULE 1113. Architectural Coatings. [Online] <http://www.aqmd.gov/rules/reg/reg11/r1113.pdf>.
5. —. RULE 431.2. Sulfur Content of Liquid Fuels. [Online] <http://www.aqmd.gov/rules/siprules/sr431-2.pdf>.
6. —. RULE 403. Fugitive Dust. [Online] <http://www.aqmd.gov/rules/reg/reg04/r403.pdf>.
7. —. RULE 1186. PM10 Emissions From Paved and Unpaved Roads, and Livestock Operations. [Online] <http://www.aqmd.gov/rules/reg/reg11/r1186.pdf>.
8. **State of California.** California Code of Regulations. *Department of Industrial Relations*. [Online] <http://www.dir.ca.gov/dlse/crr.htm>.
9. **South Coast Air Quality Management District.** Southern California Air Basins. [Online] [Cited: November 13, 2013.] <http://www.aqmd.gov/map/mapaqmd1.pdf>.
10. **Environmental Protection Agency.** National Ambient Air Quality Standards (NAAQS). [Online] 1990. [Cited: November 13, 2013.] <http://www.epa.gov/air/criteria.html>.
11. **Air Resources Board.** California Ambient Air Quality Standards (CAAQS). [Online] 2009. [Cited: November 13, 2013.] <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>.
12. **Environmental Protection Agency.** Monitor Values Report. [Online] [Cited: November 13, 2013.] [http://www.epa.gov/airdata/ad\\_rep\\_mon.html](http://www.epa.gov/airdata/ad_rep_mon.html).
13. **Air Resources Board.** Air Quality Standards and Area Designations. [Online] 2012. [Cited: November 13, 2013.] <http://www.arb.ca.gov/desig/desig.htm>.
14. **South Coast Air Quality Management District.** *Air Quality Reporting*. [pdf] Diamond Bar : Sierra Wade Associates, 1999.
15. **Air Resources Board.** [Online] [Cited: November 13, 2013.] <http://www.arb.ca.gov/adam/select8/sc8start.php>.
16. **Environmental Protection Agency.** Air Pollution and the Clean Air Act. [Online] [Cited: November 13, 2013.] <http://www.epa.gov/air/caa/>.
17. **South Coast Air Quality Management District.** 2012 Air Quality Management Plan (AQMP). [Online] 2012. [Cited: November 13, 2013.] <http://www.aqmd.gov/aqmp/2012aqmp/draft/index.html>.
18. —. *Air Quality Management Plan*. 2012.
19. **California Air Resources Board.** *The California Almanac of Emissions and Air Quality*. 2009.
20. **South Coast AQMD.** South Coast Air Basin Ozone Trend. [Online] <http://www.aqmd.gov/docs/default-source/air-quality/o3fed8max76-13.pdf?sfvrsn=13>.
21. **California Environmental Protection Agency Air Resources Board.** Air Quality Trend Summaries. *Air Resources Board*. [Online] <http://www.arb.ca.gov/adam/trends/trends1.php>.

22. —. iADAM: Air Quality Data Statistics. *Air Resources Board*. [Online] <http://www.arb.ca.gov/adam/topfour/topfour1.php>.
23. **South coast Air Quality Management District.** CEQA Air Quality Handbook (1993). [Online] 1993. [Cited: November 13, 2013.] <http://www.aqmd.gov/ceqa/oldhdbk.html>.
24. **California Environmental Protection Agency Air Resources Board.** Nitrogen Dioxide- Overview. [Online] <http://www.arb.ca.gov/research/aaqs/caaqs/no2-1/no2-1.htm>.
25. **American Lung Association.** State of the Air Southern California Regional Summary . [Online] [http://www.lung.org/local-content/california/documents/sota-2015-fact-sheet\\_southern-california.pdf](http://www.lung.org/local-content/california/documents/sota-2015-fact-sheet_southern-california.pdf).
26. **Ralph Propper, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo.** Ambient and Emission Trends of Toxic Air Contaminants in California. *American Chemical Society: Environmental Science & Technology*. 2015.
27. **Air Resources Board.** ARB's Drayage Truck Regulatory Activities. [Online] <http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>.
28. —. Truck and Bus Regulation. *On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation*. [Online] <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>.
29. **The Port of Los Angeles.** Clean Truck Program. [Online] [http://www.portoflosangeles.org/ctp/idx\\_ctp.asp](http://www.portoflosangeles.org/ctp/idx_ctp.asp).
30. **South Coast Air Quality Management District (SCAQMD).** SCAQMD Air Quality Significance Thresholds. [Online] <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>.
31. **South Coast Air Quality Management District.** California Emissions Estimator Model. [Online] 2013. [Cited: November 13, 2013.] <http://www.caleemod.com/>.
32. —. Review of the Draft Environmental Impact Report (Draft EIR) for the Oakmont Olive Grove Project. [Online] June 2, 2010. <http://www.aqmd.gov/ceqa/igr/2010/June/DEIROakmont.pdf>.
33. **Applied Planning.** *Westridge Commerce Center Final Environmental Impact Report*. 2011.
34. **Michael Brandman and Associates.** *Environmental Impact Report (EIR) Highland Fairview Corporate Park*.
35. **First Carbon Solutions.** *Environmental Impact Report Sierra Industrial Warehouse Project*. 2013.
36. **South Coast Air Quality Management District.** *Localized Significance Thresholds Methodology*. s.l. : South Coast Air Quality Management District, 2003.
37. **Lake Environmental.** US EPA Models. *Lake Environmental*. [Online] [http://www.weblakes.com/download/us\\_epa.html](http://www.weblakes.com/download/us_epa.html).
38. **South Coast Air Quality Management District.** Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. [Online] [Cited: December 9, 2013.] <http://aqmd.gov/ceqa/handbook/LST/CalEEModguidance.pdf>.
39. —. *Localized Significance Thresholds Methodology*. s.l. : South Coast Air Quality Management District, 2003.
40. —. 2003 Air Quality Management Plan. [Online] 2003. <http://www.aqmd.gov/aqmp/aqmd03aqmp.htm>.

41. —. Final 2016 Air Quality Management Plan (AQMP). [Online] March 2017.  
<http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=11>.
42. **Southern California Association of Governments.** 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. [Online] April 2016.  
<http://scagrtpscscs.net/Documents/2016/final/f2016RTPSCS.pdf>.
43. **Goss, Tracy A and Kroeger, Amy.** White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. [Online] South Coast Air Quality Management District, 2003.  
[http://www.aqmd.gov/rules/ciwg/final\\_white\\_paper.pdf](http://www.aqmd.gov/rules/ciwg/final_white_paper.pdf).

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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 S. Milliken Distribution Center Project. The information contained in this air quality impact report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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### **EDUCATION**

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

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

### **PROFESSIONAL AFFILIATIONS**

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

### **PROFESSIONAL CERTIFICATIONS**

Environmental Site Assessment – American Society for Testing and Materials • June, 2013  
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 3.1:**  
**CALEEMOD EMISSIONS MODEL OUTPUTS**

3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Passenger cars only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

## 2.0 Emissions Summary

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## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1918	2.0824	1.1386	2.2800e-003	0.2825	0.0919	0.3744	0.1160	0.0850	0.2011	0.0000	210.4366	210.4366	0.0495	0.0000	211.6736
2018	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2707	710.2707	0.0965	0.0000	712.6834
Maximum	1.1350	3.9735	3.3981	7.7800e-003	0.2825	0.1931	0.4677	0.1160	0.1813	0.2554	0.0000	710.2707	710.2707	0.0965	0.0000	712.6834

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1918	2.0824	1.1386	2.2800e-003	0.1319	0.0919	0.2238	0.0511	0.0850	0.1361	0.0000	210.4364	210.4364	0.0495	0.0000	211.6734
2018	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2703	710.2703	0.0965	0.0000	712.6830
Maximum	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2703	710.2703	0.0965	0.0000	712.6830

	ROG	NOx	CO	SO2	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	27.04	0.00	17.89	34.16	0.00	14.23	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2017	12-31-2017	2.2749	2.2749
2	1-1-2018	3-31-2018	1.2581	1.2581
3	4-1-2018	6-30-2018	1.2661	1.2661
4	7-1-2018	9-30-2018	1.2800	1.2800
		Highest	2.2749	2.2749

**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	tons/yr											MT/yr					
Area	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Energy	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	291.6200	291.6200	0.0114	2.7900e-003	292.7357	
Mobile	0.1351	0.3400	3.9162	0.0135	1.4742	9.6300e-003	1.4838	0.3913	8.8900e-003	0.4002	0.0000	1,224.4906	1,224.4906	0.0298	0.0000	1,225.2362	
Waste						0.0000	0.0000		0.0000	0.0000	53.4272	0.0000	53.4272	3.1575	0.0000	132.3637	
Water						0.0000	0.0000		0.0000	0.0000	20.5422	268.6328	289.1750	2.1210	0.0521	357.7291	
<b>Total</b>	<b>1.2935</b>	<b>0.3682</b>	<b>3.9487</b>	<b>0.0137</b>	<b>1.4742</b>	<b>0.0118</b>	<b>1.4860</b>	<b>0.3913</b>	<b>0.0111</b>	<b>0.4024</b>	<b>73.9694</b>	<b>1,784.7606</b>	<b>1,858.7300</b>	<b>5.3197</b>	<b>0.0549</b>	<b>2,008.0829</b>	

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Energy	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	291.6200	291.6200	0.0114	2.7900e-003	292.7357	
Mobile	0.1351	0.3400	3.9162	0.0135	1.4742	9.6300e-003	1.4838	0.3913	8.8900e-003	0.4002	0.0000	1,224.490 6	1,224.490 6	0.0298	0.0000	1,225.236 2	
Waste						0.0000	0.0000		0.0000	0.0000	53.4272	0.0000	53.4272	3.1575	0.0000	132.3637	
Water						0.0000	0.0000		0.0000	0.0000	20.5422	268.6328	289.1750	2.1210	0.0521	357.7291	
<b>Total</b>	<b>1.2935</b>	<b>0.3682</b>	<b>3.9487</b>	<b>0.0137</b>	<b>1.4742</b>	<b>0.0118</b>	<b>1.4860</b>	<b>0.3913</b>	<b>0.0111</b>	<b>0.4024</b>	<b>73.9694</b>	<b>1,784.760 6</b>	<b>1,858.730 0</b>	<b>5.3197</b>	<b>0.0549</b>	<b>2,008.082 9</b>	

	ROG	NOx	CO	SO2	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**

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

**Acres of Grading (Site Preparation Phase): 20**

**Acres of Grading (Grading Phase): 105**

**Acres of Paving: 3.69**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)**

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

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
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	tons/yr										MT/yr					
Fugitive Dust					0.1009	0.0000	0.1009	0.0508	0.0000	0.0508	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3852	0.1253	2.8000e-004		0.0169	0.0169		0.0155	0.0155	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6352
Total	0.0322	0.3852	0.1253	2.8000e-004	0.1009	0.0169	0.1178	0.0508	0.0155	0.0663	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6352

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**3.2 Site Preparation - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	
Total	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0394	0.0000	0.0394	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0322	0.3852	0.1253	2.8000e-004	0.0394	0.0169	0.0169	0.0155	0.0155	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6351		
Total	0.0322	0.3852	0.1253	2.8000e-004	0.0394	0.0169	0.0562	0.0198	0.0155	0.0353	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6351	

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3.2 Site Preparation - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	
Total	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	

**3.3 Grading - 2017****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	tons/yr										MT/yr					
Fugitive Dust					0.1460	0.0000	0.1460	0.0557	0.0000	0.0557	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0974	1.2048	0.5937	1.0700e-003		0.0498	0.0498		0.0458	0.0458	0.0000	99.4880	99.4880	0.0305	0.0000	100.2501
Total	0.0974	1.2048	0.5937	1.0700e-003	0.1460	0.0498	0.1958	0.0557	0.0458	0.1015	0.0000	99.4880	99.4880	0.0305	0.0000	100.2501

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**3.3 Grading - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	
Total	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0569	0.0000	0.0569	0.0217	0.0000	0.0217	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0974	1.2048	0.5937	1.0700e-003		0.0498	0.0498		0.0458	0.0458	0.0000	99.4879	99.4879	0.0305	0.0000	100.2500	
Total	0.0974	1.2048	0.5937	1.0700e-003	0.0569	0.0498	0.1067	0.0217	0.0458	0.0675	0.0000	99.4879	99.4879	0.0305	0.0000	100.2500	

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**3.3 Grading - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	
Total	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	

**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Off-Road	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4533	
Total	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4533	

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**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.4900e-003	0.1203	0.0323	2.4000e-004	5.7500e-003	1.0200e-003	6.7800e-003	1.6600e-003	9.8000e-004	2.6400e-003	0.0000	22.8645	22.8645	1.7100e-003	0.0000	22.9073	
Worker	0.0139	0.0116	0.1237	2.8000e-004	0.0255	2.1000e-004	0.0257	6.7700e-003	2.0000e-004	6.9700e-003	0.0000	25.1768	25.1768	9.5000e-004	0.0000	25.2006	
Total	0.0184	0.1320	0.1560	5.2000e-004	0.0313	1.2300e-003	0.0325	8.4300e-003	1.1800e-003	9.6100e-003	0.0000	48.0413	48.0413	2.6600e-003	0.0000	48.1079	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4532	
Total	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4532	

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**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.4900e-003	0.1203	0.0323	2.4000e-004	5.7500e-003	1.0200e-003	6.7800e-003	1.6600e-003	9.8000e-004	2.6400e-003	0.0000	22.8645	22.8645	1.7100e-003	0.0000	22.9073	
Worker	0.0139	0.0116	0.1237	2.8000e-004	0.0255	2.1000e-004	0.0257	6.7700e-003	2.0000e-004	6.9700e-003	0.0000	25.1768	25.1768	9.5000e-004	0.0000	25.2006	
Total	0.0184	0.1320	0.1560	5.2000e-004	0.0313	1.2300e-003	0.0325	8.4300e-003	1.1800e-003	9.6100e-003	0.0000	48.0413	48.0413	2.6600e-003	0.0000	48.1079	

**3.4 Building Construction - 2018****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	tons/yr											MT/yr					
Off-Road	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1159	274.1159	0.0684	0.0000	275.8256	
Total	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1159	274.1159	0.0684	0.0000	275.8256	

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### 3.4 Building Construction - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0340	0.9702	0.2500	2.0300e-003	0.0495	6.9900e-003	0.0565	0.0143	6.6900e-003	0.0210	0.0000	196.0178	196.0178	0.0140	0.0000	196.3666	
Worker	0.1063	0.0870	0.9332	2.3300e-003	0.2194	1.7800e-003	0.2212	0.0583	1.6400e-003	0.0599	0.0000	210.4480	210.4480	7.1800e-003	0.0000	210.6275	
Total	0.1403	1.0572	1.1832	4.3600e-003	0.2688	8.7700e-003	0.2776	0.0725	8.3300e-003	0.0809	0.0000	406.4658	406.4658	0.0211	0.0000	406.9941	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1156	274.1156	0.0684	0.0000	275.8253	
Total	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1156	274.1156	0.0684	0.0000	275.8253	

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**3.4 Building Construction - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0340	0.9702	0.2500	2.0300e-003	0.0495	6.9900e-003	0.0565	0.0143	6.6900e-003	0.0210	0.0000	196.0178	196.0178	0.0140	0.0000	196.3666	
Worker	0.1063	0.0870	0.9332	2.3300e-003	0.2194	1.7800e-003	0.2212	0.0583	1.6400e-003	0.0599	0.0000	210.4480	210.4480	7.1800e-003	0.0000	210.6275	
Total	0.1403	1.0572	1.1832	4.3600e-003	0.2688	8.7700e-003	0.2776	0.0725	8.3300e-003	0.0809	0.0000	406.4658	406.4658	0.0211	0.0000	406.9941	

**3.5 Paving - 2018****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	tons/yr											MT/yr					
Off-Road	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	
Paving	4.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0213	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	

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**3.5 Paving - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	
Total	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	
Paving	4.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0213	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	

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**3.5 Paving - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	
Total	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	

**3.6 Architectural Coating - 2018****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	tons/yr											MT/yr					
Archit. Coating	0.6603						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.9800e-003	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	
Total	0.6643	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	

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### 3.6 Architectural Coating - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	
Total	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	0.6603						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.9800e-003	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	
Total	0.6643	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	

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### 3.6 Architectural Coating - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	
Total	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.1351	0.3400	3.9162	0.0135	1.4742	9.6300e-003	1.4838	0.3913	8.8900e-003	0.4002	0.0000	1,224.4906	1,224.4906	0.0298	0.0000	1,225.2362	
Unmitigated	0.1351	0.3400	3.9162	0.0135	1.4742	9.6300e-003	1.4838	0.3913	8.8900e-003	0.4002	0.0000	1,224.4906	1,224.4906	0.0298	0.0000	1,225.2362	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999
Total	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	260.9892	260.9892	0.0108	2.2300e-003	261.9229	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	260.9892	260.9892	0.0108	2.2300e-003	261.9229	
NaturalGas Mitigated	3.1000e-003	0.0281	0.0236	1.7000e-004			2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129
NaturalGas Unmitigated	3.1000e-003	0.0281	0.0236	1.7000e-004			2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129

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**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	tons/yr											MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	574000	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129	
<b>Total</b>		<b>3.1000e-003</b>	<b>0.0281</b>	<b>0.0236</b>	<b>1.7000e-004</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>30.6308</b>	<b>30.6308</b>	<b>5.9000e-004</b>	<b>5.6000e-004</b>	<b>30.8129</b>	

**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	tons/yr											MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	574000	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129	
<b>Total</b>		<b>3.1000e-003</b>	<b>0.0281</b>	<b>0.0236</b>	<b>1.7000e-004</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>30.6308</b>	<b>30.6308</b>	<b>5.9000e-004</b>	<b>5.6000e-004</b>	<b>30.8129</b>	

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## 5.3 Energy by Land Use - Electricity

### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	144320	45.9834	1.9000e-003	3.9000e-004	46.1480
Unrefrigerated Warehouse-No Rail	674800	215.0057	8.8800e-003	1.8400e-003	215.7749
<b>Total</b>		<b>260.9892</b>	<b>0.0108</b>	<b>2.2300e-003</b>	<b>261.9229</b>

### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	144320	45.9834	1.9000e-003	3.9000e-004	46.1480
Unrefrigerated Warehouse-No Rail	674800	215.0057	8.8800e-003	1.8400e-003	215.7749
<b>Total</b>		<b>260.9892</b>	<b>0.0108</b>	<b>2.2300e-003</b>	<b>261.9229</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Unmitigated	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.1321					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	1.0224					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	8.5000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
<b>Total</b>	<b>1.1553</b>	<b>8.0000e-005</b>	<b>8.9300e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0171</b>	<b>0.0171</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0183</b>	

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## 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	tons/yr										MT/yr					
Architectural Coating	0.1321						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0224						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183
Total	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	289.1750	2.1210	0.0521	357.7291
Unmitigated	289.1750	2.1210	0.0521	357.7291

**7.2 Water by Land Use****Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	64.75 / 0	289.1750	2.1210	0.0521	357.7291
<b>Total</b>		<b>289.1750</b>	<b>2.1210</b>	<b>0.0521</b>	<b>357.7291</b>

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## 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	64.75 / 0	289.1750	2.1210	0.0521	357.7291
<b>Total</b>		<b>289.1750</b>	<b>2.1210</b>	<b>0.0521</b>	<b>357.7291</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	53.4272	3.1575	0.0000	132.3637
Unmitigated	53.4272	3.1575	0.0000	132.3637

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## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	263.2	53.4272	3.1575	0.0000	132.3637
<b>Total</b>		<b>53.4272</b>	<b>3.1575</b>	<b>0.0000</b>	<b>132.3637</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	263.2	53.4272	3.1575	0.0000	132.3637
<b>Total</b>		<b>53.4272</b>	<b>3.1575</b>	<b>0.0000</b>	<b>132.3637</b>

## 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

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### Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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## 11.0 Vegetation

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

## 2.0 Emissions Summary

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6235	80.4181	40.6168	0.0738	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4181	40.6168	0.0738	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2

### 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					
2017	6.6235	80.4181	40.6168	0.0738	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4181	40.6168	0.0738	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.75	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.4287	68.0338	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23	21,377.23	1.0998			21,404.73
Total	8.7781	68.1887	18.1018	0.2014	5.9663	0.5601	6.5264	1.6805	0.5363	2.2167	21,562.40	21,562.40	1.1037	3.3900e-003		21,591.00
											13	13				53

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.4287	68.0338	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23	21,377.23	1.0998			21,404.73
Total	8.7781	68.1887	18.1018	0.2014	5.9663	0.5601	6.5264	1.6805	0.5363	2.2167	21,562.40	21,562.40	1.1037	3.3900e-003		21,591.00
											13	13				53

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	5,827.413 4	5,827.413 4	1.7855			5,872.051 1
Total	6.4481	77.0380	25.0506	0.0569	20.1873	3.3730	23.5602	10.1597	3.1031	13.2628	5,827.413 4	5,827.413 4	1.7855			5,872.051 1

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563	

#### 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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	0.0000	5,827.413 3	5,827.413 3	1.7855		5,872.051 1	
Total	6.4481	77.0380	25.0506	0.0569	7.8730	3.3730	11.2460	3.9623	3.1031	7.0654	0.0000	5,827.413 3	5,827.413 3	1.7855		5,872.051 1	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563	

### 3.3 Grading - 2017

#### 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	6.4920	80.3209	39.5801	0.0715		3.3199	3.3199		3.0543	3.0543	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	9.7338	3.3199	13.0538	3.7110	3.0543	6.7653		7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003			234.9514	

#### 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	7,311.1180	7,311.1180	2.2401	7,367.1208	
Off-Road	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	3.3199	3.0543	3.0543	0.0000	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	7.1161	1.4473	3.0543	4.5016	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003		234.9514		
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123		2,861.887 4		
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2

3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	<b>0.0879</b>	<b>0.0635</b>	<b>0.6811</b>	<b>1.7200e-003</b>	<b>0.1677</b>	<b>1.3400e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2300e-003</b>	<b>0.0457</b>		<b>171.1019</b>	<b>171.1019</b>	<b>5.8400e-003</b>		<b>171.2479</b>	

**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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Total	<b>2.1271</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>			<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.088 7</b>	<b>2,294.088 7</b>	<b>0.7142</b>		<b>2,311.943 2</b>

3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	2.4287	68.0338	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23 82	21,377.23 82	1.0998			21,404.73 24	
Unmitigated	2.4287	68.0338	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23 82	21,377.23 82	1.0998			21,404.73 24	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	179.20	179.20	179.20	2,433,230	2,433,230	2,433,230	2,433,230
Total	179.20	179.20	179.20	2,433,230	2,433,230	2,433,230	2,433,230

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

## 2.0 Emissions Summary

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6131	80.4096	40.7200	0.0740	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4096	40.7200	0.0740	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3

### 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					
2017	6.6131	80.4096	40.7200	0.0740	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4096	40.7200	0.0740	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.76	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	2.3984	66.1949	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27	21,544.27	1.0721			21,571.07
Total	<b>8.7479</b>	<b>66.3497</b>	<b>17.6089</b>	<b>0.2030</b>	<b>5.9663</b>	<b>0.5574</b>	<b>6.5237</b>	<b>1.6805</b>	<b>0.5337</b>	<b>2.2142</b>	<b>21,729.43</b>	<b>21,729.43</b>	<b>1.0761</b>	<b>3.3900e-003</b>	<b>21,757.34</b>	<b>99</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	2.3984	66.1949	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27	21,544.27	1.0721			21,571.07
Total	<b>8.7479</b>	<b>66.3497</b>	<b>17.6089</b>	<b>0.2030</b>	<b>5.9663</b>	<b>0.5574</b>	<b>6.5237</b>	<b>1.6805</b>	<b>0.5337</b>	<b>2.2142</b>	<b>21,729.43</b>	<b>21,729.43</b>	<b>1.0761</b>	<b>3.3900e-003</b>	<b>21,757.34</b>	<b>99</b>

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	5,827.413 4	5,827.413 4	1.7855			5,872.051 1
Total	6.4481	77.0380	25.0506	0.0569	20.1873	3.3730	23.5602	10.1597	3.1031	13.2628	5,827.413 4	5,827.413 4	1.7855			5,872.051 1

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

#### 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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	0.0000	5,827.4133	5,827.4133	1.7855		5,872.0511	
Total	6.4481	77.0380	25.0506	0.0569	7.8730	3.3730	11.2460	3.9623	3.1031	7.0654	0.0000	5,827.4133	5,827.4133	1.7855		5,872.0511	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

### 3.3 Grading - 2017

#### 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	6.4920	80.3209	39.5801	0.0715		3.3199	3.3199		3.0543	3.0543	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	9.7338	3.3199	13.0538	3.7110	3.0543	6.7653		7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

#### 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	6.4920	80.3209	39.5801	0.0715		3.3199	3.3199		3.0543	3.0543	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	7.1161	1.4473	3.0543	4.5016	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123			2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2017****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

**3.4 Building Construction - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

**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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	
Paving	0.4834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	2.3984	66.1949	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27 46	21,544.27 46	1.0721		21,571.07 70		
Unmitigated	2.3984	66.1949	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27 46	21,544.27 46	1.0721		21,571.07 70		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	179.20	179.20	179.20	2,433,230		2,433,230	
Total	179.20	179.20	179.20	2,433,230		2,433,230	

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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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3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Annual**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

## 2.0 Emissions Summary

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## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1918	2.0824	1.1386	2.2800e-003	0.2825	0.0919	0.3744	0.1160	0.0850	0.2011	0.0000	210.4366	210.4366	0.0495	0.0000	211.6736
2018	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2707	710.2707	0.0965	0.0000	712.6834
Maximum	1.1350	3.9735	3.3981	7.7800e-003	0.2825	0.1931	0.4677	0.1160	0.1813	0.2554	0.0000	710.2707	710.2707	0.0965	0.0000	712.6834

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.1918	2.0824	1.1386	2.2800e-003	0.1319	0.0919	0.2238	0.0511	0.0850	0.1361	0.0000	210.4364	210.4364	0.0495	0.0000	211.6734
2018	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2703	710.2703	0.0965	0.0000	712.6830
Maximum	1.1350	3.9735	3.3981	7.7800e-003	0.2745	0.1931	0.4677	0.0741	0.1813	0.2554	0.0000	710.2703	710.2703	0.0965	0.0000	712.6830

	ROG	NOx	CO	SO2	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	27.04	0.00	17.89	34.16	0.00	14.23	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2017	12-31-2017	2.2749	2.2749
2	1-1-2018	3-31-2018	1.2581	1.2581
3	4-1-2018	6-30-2018	1.2661	1.2661
4	7-1-2018	9-30-2018	1.2800	1.2800
		Highest	2.2749	2.2749

**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	tons/yr											MT/yr					
Area	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Energy	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	291.6200	291.6200	0.0114	2.7900e-003	292.7357	
Mobile	0.4389	12.5748	3.2008	0.0366	1.0688	0.0994	1.1681	0.3017	0.0950	0.3967	0.0000	3,541.3231	3,541.3231	0.1787	0.0000	3,545.7910	
Waste						0.0000	0.0000		0.0000	0.0000	53.4272	0.0000	53.4272	3.1575	0.0000	132.3637	
Water						0.0000	0.0000		0.0000	0.0000	20.5422	268.6328	289.1750	2.1210	0.0521	357.7291	
<b>Total</b>	<b>1.5973</b>	<b>12.6030</b>	<b>3.2334</b>	<b>0.0368</b>	<b>1.0688</b>	<b>0.1015</b>	<b>1.1703</b>	<b>0.3017</b>	<b>0.0972</b>	<b>0.3989</b>	<b>73.9694</b>	<b>4,101.5931</b>	<b>4,175.5625</b>	<b>5.4686</b>	<b>0.0549</b>	<b>4,328.6378</b>	

3100 Milliken Avenue - South Coast AQMD Air District, Annual

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Energy	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	291.6200	291.6200	0.0114	2.7900e-003	292.7357	
Mobile	0.4389	12.5748	3.2008	0.0366	1.0688	0.0994	1.1681	0.3017	0.0950	0.3967	0.0000	3,541.323 1	3,541.323 1	0.1787	0.0000	3,545.791 0	
Waste						0.0000	0.0000		0.0000	0.0000	53.4272	0.0000	53.4272	3.1575	0.0000	132.3637	
Water						0.0000	0.0000		0.0000	0.0000	20.5422	268.6328	289.1750	2.1210	0.0521	357.7291	
<b>Total</b>	<b>1.5973</b>	<b>12.6030</b>	<b>3.2334</b>	<b>0.0368</b>	<b>1.0688</b>	<b>0.1015</b>	<b>1.1703</b>	<b>0.3017</b>	<b>0.0972</b>	<b>0.3989</b>	<b>73.9694</b>	<b>4,101.593 1</b>	<b>4,175.562 5</b>	<b>5.4686</b>	<b>0.0549</b>	<b>4,328.637 8</b>	

	ROG	NOx	CO	SO2	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

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

**Acres of Grading (Site Preparation Phase): 20**

**Acres of Grading (Grading Phase): 105**

**Acres of Paving: 3.69**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)**

**OffRoad Equipment**

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

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
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	tons/yr										MT/yr					
Fugitive Dust					0.1009	0.0000	0.1009	0.0508	0.0000	0.0508	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3852	0.1253	2.8000e-004		0.0169	0.0169		0.0155	0.0155	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6352
Total	0.0322	0.3852	0.1253	2.8000e-004	0.1009	0.0169	0.1178	0.0508	0.0155	0.0663	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6352

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3.2 Site Preparation - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	
Total	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0394	0.0000	0.0394	0.0198	0.0000	0.0198	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0322	0.3852	0.1253	2.8000e-004	0.0394	0.0169	0.0169	0.0155	0.0155	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6351		
Total	0.0322	0.3852	0.1253	2.8000e-004	0.0394	0.0169	0.0562	0.0198	0.0155	0.0353	0.0000	26.4327	26.4327	8.1000e-003	0.0000	26.6351	

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3.2 Site Preparation - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	
Total	5.4000e-004	4.5000e-004	4.7900e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9746	0.9746	4.0000e-005	0.0000	0.9755	

**3.3 Grading - 2017****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	tons/yr										MT/yr					
Fugitive Dust					0.1460	0.0000	0.1460	0.0557	0.0000	0.0557	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0974	1.2048	0.5937	1.0700e-003		0.0498	0.0498		0.0458	0.0458	0.0000	99.4880	99.4880	0.0305	0.0000	100.2501
Total	0.0974	1.2048	0.5937	1.0700e-003	0.1460	0.0498	0.1958	0.0557	0.0458	0.1015	0.0000	99.4880	99.4880	0.0305	0.0000	100.2501

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

**3.3 Grading - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	
Total	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.0569	0.0000	0.0569	0.0217	0.0000	0.0217	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0974	1.2048	0.5937	1.0700e-003		0.0498	0.0498		0.0458	0.0458	0.0000	99.4879	99.4879	0.0305	0.0000	100.2500	
Total	0.0974	1.2048	0.5937	1.0700e-003	0.0569	0.0498	0.1067	0.0217	0.0458	0.0675	0.0000	99.4879	99.4879	0.0305	0.0000	100.2500	

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**3.3 Grading - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	
Total	1.7900e-003	1.5000e-003	0.0160	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.2486	3.2486	1.2000e-004	0.0000	3.2517	

**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Off-Road	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4533	
Total	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4533	

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**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.4900e-003	0.1203	0.0323	2.4000e-004	5.7500e-003	1.0200e-003	6.7800e-003	1.6600e-003	9.8000e-004	2.6400e-003	0.0000	22.8645	22.8645	1.7100e-003	0.0000	22.9073	
Worker	0.0139	0.0116	0.1237	2.8000e-004	0.0255	2.1000e-004	0.0257	6.7700e-003	2.0000e-004	6.9700e-003	0.0000	25.1768	25.1768	9.5000e-004	0.0000	25.2006	
Total	0.0184	0.1320	0.1560	5.2000e-004	0.0313	1.2300e-003	0.0325	8.4300e-003	1.1800e-003	9.6100e-003	0.0000	48.0413	48.0413	2.6600e-003	0.0000	48.1079	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4532	
Total	0.0415	0.3585	0.2429	3.6000e-004		0.0240	0.0240		0.0225	0.0225	0.0000	32.2513	32.2513	8.0800e-003	0.0000	32.4532	

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**3.4 Building Construction - 2017****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.4900e-003	0.1203	0.0323	2.4000e-004	5.7500e-003	1.0200e-003	6.7800e-003	1.6600e-003	9.8000e-004	2.6400e-003	0.0000	22.8645	22.8645	1.7100e-003	0.0000	22.9073	
Worker	0.0139	0.0116	0.1237	2.8000e-004	0.0255	2.1000e-004	0.0257	6.7700e-003	2.0000e-004	6.9700e-003	0.0000	25.1768	25.1768	9.5000e-004	0.0000	25.2006	
Total	0.0184	0.1320	0.1560	5.2000e-004	0.0313	1.2300e-003	0.0325	8.4300e-003	1.1800e-003	9.6100e-003	0.0000	48.0413	48.0413	2.6600e-003	0.0000	48.1079	

**3.4 Building Construction - 2018****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	tons/yr											MT/yr					
Off-Road	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1159	274.1159	0.0684	0.0000	275.8256	
Total	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1159	274.1159	0.0684	0.0000	275.8256	

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### 3.4 Building Construction - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0340	0.9702	0.2500	2.0300e-003	0.0495	6.9900e-003	0.0565	0.0143	6.6900e-003	0.0210	0.0000	196.0178	196.0178	0.0140	0.0000	196.3666	
Worker	0.1063	0.0870	0.9332	2.3300e-003	0.2194	1.7800e-003	0.2212	0.0583	1.6400e-003	0.0599	0.0000	210.4480	210.4480	7.1800e-003	0.0000	210.6275	
Total	0.1403	1.0572	1.1832	4.3600e-003	0.2688	8.7700e-003	0.2776	0.0725	8.3300e-003	0.0809	0.0000	406.4658	406.4658	0.0211	0.0000	406.9941	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1156	274.1156	0.0684	0.0000	275.8253	
Total	0.3064	2.7121	2.0180	3.1000e-003		0.1727	0.1727		0.1621	0.1621	0.0000	274.1156	274.1156	0.0684	0.0000	275.8253	

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**3.4 Building Construction - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0340	0.9702	0.2500	2.0300e-003	0.0495	6.9900e-003	0.0565	0.0143	6.6900e-003	0.0210	0.0000	196.0178	196.0178	0.0140	0.0000	196.3666	
Worker	0.1063	0.0870	0.9332	2.3300e-003	0.2194	1.7800e-003	0.2212	0.0583	1.6400e-003	0.0599	0.0000	210.4480	210.4480	7.1800e-003	0.0000	210.6275	
Total	0.1403	1.0572	1.1832	4.3600e-003	0.2688	8.7700e-003	0.2776	0.0725	8.3300e-003	0.0809	0.0000	406.4658	406.4658	0.0211	0.0000	406.9941	

**3.5 Paving - 2018****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	tons/yr											MT/yr					
Off-Road	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	
Paving	4.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0213	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	

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**3.5 Paving - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	
Total	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0164	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	
Paving	4.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0213	0.1752	0.1480	2.3000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	20.8116	20.8116	6.4800e-003	0.0000	20.9736	

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**3.5 Paving - 2018****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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	
Total	8.0000e-004	6.5000e-004	7.0000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5788	1.5788	5.0000e-005	0.0000	1.5801	

**3.6 Architectural Coating - 2018****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	tons/yr											MT/yr					
Archit. Coating	0.6603						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.9800e-003	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	
Total	0.6643	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	

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### 3.6 Architectural Coating - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	
Total	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	0.6603						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.9800e-003	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	
Total	0.6643	0.0267	0.0247	4.0000e-005		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003	0.0000	3.4043	3.4043	3.2000e-004	0.0000	3.4124	

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### 3.6 Architectural Coating - 2018

#### 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	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	
Total	1.9700e-003	1.6100e-003	0.0173	4.0000e-005	4.0600e-003	3.0000e-005	4.0900e-003	1.0800e-003	3.0000e-005	1.1100e-003	0.0000	3.8943	3.8943	1.3000e-004	0.0000	3.8976	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	0.4389	12.5748	3.2008	0.0366	1.0688	0.0994	1.1681	0.3017	0.0950	0.3967	0.0000	3,541.323 1	3,541.323 1	0.1787	0.0000	3,545.791 0	
Unmitigated	0.4389	12.5748	3.2008	0.0366	1.0688	0.0994	1.1681	0.3017	0.0950	0.3967	0.0000	3,541.323 1	3,541.323 1	0.1787	0.0000	3,545.791 0	

**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	179.20	179.20	179.20	2,433,230		2,433,230	
Total	179.20	179.20	179.20	2,433,230		2,433,230	

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

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## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	260.9892	260.9892	0.0108	2.2300e-003	261.9229	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	260.9892	260.9892	0.0108	2.2300e-003	261.9229	
NaturalGas Mitigated	3.1000e-003	0.0281	0.0236	1.7000e-004			2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129
NaturalGas Unmitigated	3.1000e-003	0.0281	0.0236	1.7000e-004			2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129

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**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	tons/yr											MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	574000	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129	
<b>Total</b>		<b>3.1000e-003</b>	<b>0.0281</b>	<b>0.0236</b>	<b>1.7000e-004</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>30.6308</b>	<b>30.6308</b>	<b>5.9000e-004</b>	<b>5.6000e-004</b>	<b>30.8129</b>	

**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	tons/yr											MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Unrefrigerated Warehouse-No Rail	574000	3.1000e-003	0.0281	0.0236	1.7000e-004		2.1400e-003	2.1400e-003		2.1400e-003	2.1400e-003	0.0000	30.6308	30.6308	5.9000e-004	5.6000e-004	30.8129	
<b>Total</b>		<b>3.1000e-003</b>	<b>0.0281</b>	<b>0.0236</b>	<b>1.7000e-004</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>30.6308</b>	<b>30.6308</b>	<b>5.9000e-004</b>	<b>5.6000e-004</b>	<b>30.8129</b>	

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### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	144320	45.9834	1.9000e-003	3.9000e-004	46.1480
Unrefrigerated Warehouse-No Rail	674800	215.0057	8.8800e-003	1.8400e-003	215.7749
<b>Total</b>		<b>260.9892</b>	<b>0.0108</b>	<b>2.2300e-003</b>	<b>261.9229</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	144320	45.9834	1.9000e-003	3.9000e-004	46.1480
Unrefrigerated Warehouse-No Rail	674800	215.0057	8.8800e-003	1.8400e-003	215.7749
<b>Total</b>		<b>260.9892</b>	<b>0.0108</b>	<b>2.2300e-003</b>	<b>261.9229</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
Unmitigated	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.1321					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	1.0224					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	8.5000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183	
<b>Total</b>	<b>1.1553</b>	<b>8.0000e-005</b>	<b>8.9300e-003</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0171</b>	<b>0.0171</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.0183</b>	

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## 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	tons/yr										MT/yr					
Architectural Coating	0.1321						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0224						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5000e-004	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183
Total	1.1553	8.0000e-005	8.9300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0171	0.0171	5.0000e-005	0.0000	0.0183

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

## 3100 Milliken Avenue - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	289.1750	2.1210	0.0521	357.7291
Unmitigated	289.1750	2.1210	0.0521	357.7291

**7.2 Water by Land Use****Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	64.75 / 0	289.1750	2.1210	0.0521	357.7291
<b>Total</b>		<b>289.1750</b>	<b>2.1210</b>	<b>0.0521</b>	<b>357.7291</b>

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## 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	64.75 / 0	289.1750	2.1210	0.0521	357.7291
<b>Total</b>		<b>289.1750</b>	<b>2.1210</b>	<b>0.0521</b>	<b>357.7291</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	53.4272	3.1575	0.0000	132.3637
Unmitigated	53.4272	3.1575	0.0000	132.3637

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## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	263.2	53.4272	3.1575	0.0000	132.3637
<b>Total</b>		<b>53.4272</b>	<b>3.1575</b>	<b>0.0000</b>	<b>132.3637</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	263.2	53.4272	3.1575	0.0000	132.3637
<b>Total</b>		<b>53.4272</b>	<b>3.1575</b>	<b>0.0000</b>	<b>132.3637</b>

## 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

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### Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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## 11.0 Vegetation

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Passenger cars only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

## 2.0 Emissions Summary

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6235	80.4181	40.6168	0.0738	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4181	40.6168	0.0738	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2

### 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					
2017	6.6235	80.4181	40.6168	0.0738	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4181	40.6168	0.0738	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,545.847 5	7,545.847 5	2.2490	0.0000	7,602.072 2

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.75	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	0.7446	1.8141	20.8158	0.0731	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,296.6386	7,296.6386	0.1773			7,301.0706
Total	7.0941	1.9690	21.0167	0.0741	8.2525	0.0649	8.3174	2.1876	0.0609	2.2485	7,481.8017	7,481.8017	0.1812	3.3900e-003		7,487.3435

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	0.7446	1.8141	20.8158	0.0731	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,296.6386	7,296.6386	0.1773			7,301.0706
Total	7.0941	1.9690	21.0167	0.0741	8.2525	0.0649	8.3174	2.1876	0.0609	2.2485	7,481.8017	7,481.8017	0.1812	3.3900e-003		7,487.3435

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	5,827.413 4	5,827.413 4	1.7855			5,872.051 1
Total	6.4481	77.0380	25.0506	0.0569	20.1873	3.3730	23.5602	10.1597	3.1031	13.2628	5,827.413 4	5,827.413 4	1.7855			5,872.051 1

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### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563	

#### 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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	0.0000	5,827.413 3	5,827.413 3	1.7855		5,872.051 1	
Total	6.4481	77.0380	25.0506	0.0569	7.8730	3.3730	11.2460	3.9623	3.1031	7.0654	0.0000	5,827.413 3	5,827.413 3	1.7855		5,872.051 1	

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### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	

### 3.3 Grading - 2017

#### 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	7,311.1180	7,311.1180	2.2401	7,367.1208	
Off-Road	6.4920	80.3209	39.5801	0.0715	9.7338	3.3199	3.3199	3.0543	3.0543	6.7653	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	9.7338	3.3199	13.0538	3.7110	3.0543	6.7653	7,311.1180	7,311.1180	2.2401			7,367.1208	

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### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003			234.9514	

#### 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	7,311.1180	7,311.1180	2.2401	7,367.1208	
Off-Road	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	3.3199	3.0543	3.0543	0.0000	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	7.1161	1.4473	3.0543	4.5016	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	

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### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003		234.9514		
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123		2,861.887 4		
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123		2,861.887 4		

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### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

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### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

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### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

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### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2

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**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	<b>0.0879</b>	<b>0.0635</b>	<b>0.6811</b>	<b>1.7200e-003</b>	<b>0.1677</b>	<b>1.3400e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2300e-003</b>	<b>0.0457</b>		<b>171.1019</b>	<b>171.1019</b>	<b>5.8400e-003</b>		<b>171.2479</b>	

**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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Total	<b>2.1271</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>			<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.088 7</b>	<b>2,294.088 7</b>	<b>0.7142</b>		<b>2,311.943 2</b>

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**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

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### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Mitigated	0.7446	1.8141	20.8158	0.0731	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,296.638 6	7,296.638 6	0.1773			7,301.070 6	
Unmitigated	0.7446	1.8141	20.8158	0.0731	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,296.638 6	7,296.638 6	0.1773			7,301.070 6	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999
Total	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment -

Off-road Equipment - Based on an 8 hour work day

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

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Passenger cars only

Fleet Mix - Passenger cars only

## Construction Off-road Equipment Mitigation -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblConstructionPhase	PhaseEndDate	4/12/2019	12/21/2018
tblConstructionPhase	PhaseEndDate	2/15/2019	10/26/2018
tblConstructionPhase	PhaseEndDate	12/22/2017	11/24/2017
tblConstructionPhase	PhaseEndDate	3/15/2019	11/23/2018
tblConstructionPhase	PhaseEndDate	11/10/2017	10/13/2017
tblConstructionPhase	PhaseStartDate	3/16/2019	11/24/2018
tblConstructionPhase	PhaseStartDate	12/23/2017	11/25/2017

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblConstructionPhase	PhaseStartDate	11/11/2017	10/14/2017
tblConstructionPhase	PhaseStartDate	2/16/2019	10/27/2018
tblConstructionPhase	PhaseStartDate	10/28/2017	10/1/2017
tblFleetMix	HHD	0.03	0.00
tblFleetMix	LDA	0.54	1.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	LoadFactor	0.43	0.43
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentType		Crawler Tractors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

## 2.0 Emissions Summary

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6131	80.4096	40.7200	0.0740	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4096	40.7200	0.0740	20.3885	3.3746	23.7631	10.2131	3.1047	13.3177	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3

### 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					
2017	6.6131	80.4096	40.7200	0.0740	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4096	40.7200	0.0740	8.0742	3.3746	11.4489	4.0156	3.1047	7.1203	0.0000	7,561.988 2	7,561.988 2	2.2496	0.0000	7,618.227 3

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.76	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	0.8041	1.6642	23.7151	0.0784	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,818.8043	7,818.8043	0.1921			7,823.6063
Total	7.1536	1.8190	23.9160	0.0794	8.2525	0.0649	8.3174	2.1876	0.0609	2.2485	8,003.9674	8,003.9674	0.1960	3.3900e-003		8,009.8792

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	0.8041	1.6642	23.7151	0.0784	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,818.8043	7,818.8043	0.1921			7,823.6063
Total	7.1536	1.8190	23.9160	0.0794	8.2525	0.0649	8.3174	2.1876	0.0609	2.2485	8,003.9674	8,003.9674	0.1960	3.3900e-003		8,009.8792

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

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

Trips and VMT

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	37.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	186.00	73.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Site Preparation - 2017****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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	5,827.413 4	5,827.413 4	1.7855			5,872.051 1
Total	6.4481	77.0380	25.0506	0.0569	20.1873	3.3730	23.5602	10.1597	3.1031	13.2628	5,827.413 4	5,827.413 4	1.7855			5,872.051 1

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

#### 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	6.4481	77.0380	25.0506	0.0569		3.3730	3.3730		3.1031	3.1031	0.0000	5,827.4133	5,827.4133	1.7855		5,872.0511	
Total	6.4481	77.0380	25.0506	0.0569	7.8730	3.3730	11.2460	3.9623	3.1031	7.0654	0.0000	5,827.4133	5,827.4133	1.7855		5,872.0511	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

### 3.3 Grading - 2017

#### 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	6.4920	80.3209	39.5801	0.0715		3.3199	3.3199		3.0543	3.0543	7,311.1180	7,311.1180	2.2401			7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	9.7338	3.3199	13.0538	3.7110	3.0543	6.7653		7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

#### 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	6.4920	80.3209	39.5801	0.0715		3.3199	3.3199		3.0543	3.0543	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	
Total	6.4920	80.3209	39.5801	0.0715	3.7962	3.3199	7.1161	1.4473	3.0543	4.5016	0.0000	7,311.1180	7,311.1180	2.2401		7,367.1208	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123			2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.4 Building Construction - 2017****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

**3.4 Building Construction - 2018****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

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### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	

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**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	
Paving	0.4834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2	

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**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Mitigated	0.8041	1.6642	23.7151	0.0784	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,818.804 3	7,818.804 3	0.1921			7,823.606 3	
Unmitigated	0.8041	1.6642	23.7151	0.0784	8.2525	0.0530	8.3054	2.1876	0.0489	2.2365	7,818.804 3	7,818.804 3	0.1921			7,823.606 3	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999
Total	291.20	291.20	291.20	3,953,999	3,953,999	3,953,999	3,953,999

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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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3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

## Project Characteristics - Operational Year of 2018

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment - Based on an 8 hour work day

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Construction Off-road Equipment Mitigation -

Fleet Mix - Trucks only

Vehicle Emission Factors - 2009 or better trucks

Vehicle Emission Factors - 2009 or better trucks

Vehicle Emission Factors - 2009 or better trucks

Energy Use -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleEF	HHD	4.88	3.22
tblVehicleEF	HHD	4.61	3.05
tblVehicleEF	HHD	4.81	3.17
tblVehicleEF	LHD1	1.64	0.21
tblVehicleEF	LHD1	1.53	0.20
tblVehicleEF	LHD1	1.61	0.21
tblVehicleEF	MHD	2.92	1.13
tblVehicleEF	MHD	2.75	1.07
tblVehicleEF	MHD	2.86	1.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

## 2.0 Emissions Summary

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6274	80.4698	40.6324	0.0739	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,550.332 9	7,550.332 9	2.2504	0.0000	7,606.591 9
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4698	40.6324	0.0739	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,550.332 9	7,550.332 9	2.2504	0.0000	7,606.591 9

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6274	80.4698	40.6324	0.0739	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,550.332 9	7,550.332 9	2.2504	0.0000	7,606.591 9
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.986 2	6,908.986 2	0.9224	0.0000	6,932.045 4
Maximum	66.6452	80.4698	40.6324	0.0739	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,550.332 9	7,550.332 9	2.2504	0.0000	7,606.591 9

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.74	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.4287	44.1286	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23	21,377.23	1.0998			21,404.73
Total	8.7781	44.2835	18.1018	0.2014	5.9663	0.5601	6.5264	1.6805	0.5363	2.2167	21,562.40	21,562.40	1.1037	3.3900e-003		21,591.00
											13	13				53

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.4287	44.1286	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23	21,377.23	1.0998			21,404.73
Total	8.7781	44.2835	18.1018	0.2014	5.9663	0.5601	6.5264	1.6805	0.5363	2.2167	21,562.40	21,562.40	1.1037	3.3900e-003		21,591.00
											13	13				53

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	186.00	73.00	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	37.00	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 Site Preparation - 2017****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	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	5,836.384 0	5,836.384 0	1.7883			5,881.090 5	
Total	6.4558	77.1413	25.0818	0.0570	20.1873	3.3769	23.5642	10.1597	3.1068	13.2665		5,836.384 0	5,836.384 0	1.7883			5,881.090 5

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	

#### 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	0.0000	0.0000	0.0000	0.0000	
Off-Road	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	
Total	6.4558	77.1413	25.0818	0.0570	7.8730	3.3769	11.2500	3.9623	3.1068	7.0691	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	

### 3.3 Grading - 2017

#### 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	7,315.603	7,315.603	2.2415	7,371.640	
Off-Road	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	3.3219	3.0561	3.0561	6.7672	7,315.603	7,315.603	2.2415			5	
Total	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	13.0557	3.7110	3.0561	6.7672	7,315.603	7,315.603	2.2415			5	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			

#### 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	7,315.603	7,315.603	2.2415	7,371.640	
Off-Road	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	3.3219	3.0561	3.0561	0.0000	7,315.603	7,315.603	2.2415			5	
Total	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	7.1181	1.4473	3.0561	4.5034	0.0000	7,315.603	7,315.603	2.2415		7,371.640	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003		234.9514		
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123		2,861.887 4		
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2

3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	<b>0.0879</b>	<b>0.0635</b>	<b>0.6811</b>	<b>1.7200e-003</b>	<b>0.1677</b>	<b>1.3400e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2300e-003</b>	<b>0.0457</b>		<b>171.1019</b>	<b>171.1019</b>	<b>5.8400e-003</b>		<b>171.2479</b>	

**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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Total	<b>2.1271</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>			<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.088 7</b>	<b>2,294.088 7</b>	<b>0.7142</b>		<b>2,311.943 2</b>

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**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	2.4287	44.1286	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23 82	21,377.23 82	1.0998			21,404.73 24	
Unmitigated	2.4287	44.1286	17.9008	0.2005	5.9663	0.5481	6.5144	1.6805	0.5243	2.2047	21,377.23 82	21,377.23 82	1.0998			21,404.73 24	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	179.20	179.20	179.20	2,433,230	2,433,230	2,433,230	2,433,230
Total	179.20	179.20	179.20	2,433,230	2,433,230	2,433,230	2,433,230

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

## Project Characteristics - Operational Year of 2018

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment - Based on an 8 hour work day

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Construction Off-road Equipment Mitigation -

Fleet Mix - Trucks only

Vehicle Emission Factors - 2009 or better trucks

Vehicle Emission Factors - 2009 or better trucks

Vehicle Emission Factors - 2009 or better trucks

Energy Use -

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17
tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleEF	HHD	4.88	3.22
tblVehicleEF	HHD	4.61	3.05
tblVehicleEF	HHD	4.81	3.17
tblVehicleEF	LHD1	1.64	0.21
tblVehicleEF	LHD1	1.53	0.20
tblVehicleEF	LHD1	1.61	0.21
tblVehicleEF	MHD	2.92	1.13
tblVehicleEF	MHD	2.75	1.07
tblVehicleEF	MHD	2.86	1.11
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

**2.0 Emissions Summary**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6169	80.4613	40.7356	0.0740	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4613	40.7356	0.0740	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0

### 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					
2017	6.6169	80.4613	40.7356	0.0740	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.998 6	7,112.998 6	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4613	40.7356	0.0740	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.75	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.3984	43.3010	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27	21,544.27	1.0721		21,571.07	
Total	<b>8.7479</b>	<b>43.4558</b>	<b>17.6089</b>	<b>0.2030</b>	<b>5.9663</b>	<b>0.5574</b>	<b>6.5237</b>	<b>1.6805</b>	<b>0.5337</b>	<b>2.2142</b>	<b>21,729.43</b>	<b>21,729.43</b>	<b>1.0761</b>	<b>3.3900e-003</b>	<b>21,757.34</b>	
											<i>77</i>	<i>77</i>				<i>99</i>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004	2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117	0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115	
Mobile	2.3984	43.3010	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27	21,544.27	1.0721		21,571.07	
Total	<b>8.7479</b>	<b>43.4558</b>	<b>17.6089</b>	<b>0.2030</b>	<b>5.9663</b>	<b>0.5574</b>	<b>6.5237</b>	<b>1.6805</b>	<b>0.5337</b>	<b>2.2142</b>	<b>21,729.43</b>	<b>21,729.43</b>	<b>1.0761</b>	<b>3.3900e-003</b>	<b>21,757.34</b>	
											<i>77</i>	<i>77</i>				<i>99</i>

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	186.00	73.00	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	37.00	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 Site Preparation - 2017****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	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	5,836.384 0	5,836.384 0	1.7883			5,881.090 5	
Total	6.4558	77.1413	25.0818	0.0570	20.1873	3.3769	23.5642	10.1597	3.1068	13.2665		5,836.384 0	5,836.384 0	1.7883			5,881.090 5

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

#### 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	5,836.3840	5,836.3840	1.7883	5,881.0905	
Off-Road	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	0.0000						
Total	6.4558	77.1413	25.0818	0.0570	7.8730	3.3769	11.2500	3.9623	3.1068	7.0691	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

### 3.3 Grading - 2017

#### 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	6.4958	80.3726	39.5958	0.0715		3.3219	3.3219		3.0561	3.0561	7,315.603 3	7,315.603 3	2.2415			7,371.640 5	
Total	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	13.0557	3.7110	3.0561	6.7672		7,315.603 3	7,315.603 3	2.2415		7,371.640 5	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

#### 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	6.4958	80.3726	39.5958	0.0715		3.3219	3.3219		3.0561	3.0561	0.0000	7,315.6033	7,315.6033	2.2415		7,371.6405	
Total	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	7.1181	1.4473	3.0561	4.5034	0.0000	7,315.6033	7,315.6033	2.2415		7,371.6405	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123			2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2		
Paving	0.4834					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000		
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	
Paving	0.4834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Mitigated	2.3984	43.3010	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27 46	21,544.27 46	1.0721		21,571.07 70		
Unmitigated	2.3984	43.3010	17.4079	0.2020	5.9663	0.5455	6.5117	1.6805	0.5218	2.2022	21,544.27 46	21,544.27 46	1.0721		21,571.07 70		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	179.20	179.20	179.20	2,433,230		2,433,230	
Total	179.20	179.20	179.20	2,433,230		2,433,230	

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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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3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment - Based on an 8 hour work day

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Construction Off-road Equipment Mitigation -

Fleet Mix - Passenger cars only

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblFleetMix	FleetMixLandUseSubType	Unrefrigerated Warehouse-No Rail	Parking Lot
tblFleetMix	FleetMixLandUseSubType	Parking Lot	Unrefrigerated Warehouse-No Rail
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.48
tblVehicleTrips	SU_TR	1.68	0.48
tblVehicleTrips	WD_TR	1.68	0.48

**2.0 Emissions Summary**

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3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6274	80.4698	40.6324	0.0739	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,550.3329	7,550.3329	2.2504	0.0000	7,606.5919
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.9862	6,908.9862	0.9224	0.0000	6,932.0454
Maximum	66.6452	80.4698	40.6324	0.0739	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,550.3329	7,550.3329	2.2504	0.0000	7,606.5919

### 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					
2017	6.6274	80.4698	40.6324	0.0739	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,550.3329	7,550.3329	2.2504	0.0000	7,606.5919
2018	66.6452	34.8772	29.6637	0.0687	2.5463	1.6888	4.2351	0.6859	1.5862	2.2721	0.0000	6,908.9862	6,908.9862	0.9224	0.0000	6,932.0454
Maximum	66.6452	80.4698	40.6324	0.0739	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,550.3329	7,550.3329	2.2504	0.0000	7,606.5919

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.74	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	1.8215	51.0254	13.4256	0.1504	4.4747	0.4111	4.8858	1.2603	0.3932	1.6536	16,032.92 87	16,032.92 87	0.8248			16,053.54 93
<b>Total</b>	<b>8.1710</b>	<b>51.1802</b>	<b>13.6266</b>	<b>0.1513</b>	<b>4.4747</b>	<b>0.4231</b>	<b>4.8978</b>	<b>1.2603</b>	<b>0.4052</b>	<b>1.6655</b>	<b>16,218.09 18</b>	<b>16,218.09 18</b>	<b>0.8288</b>	<b>3.3900e-003</b>	<b>16,239.82 22</b>	

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	1.8215	51.0254	13.4256	0.1504	4.4747	0.4111	4.8858	1.2603	0.3932	1.6536	16,032.92 87	16,032.92 87	0.8248			16,053.54 93
<b>Total</b>	<b>8.1710</b>	<b>51.1802</b>	<b>13.6266</b>	<b>0.1513</b>	<b>4.4747</b>	<b>0.4231</b>	<b>4.8978</b>	<b>1.2603</b>	<b>0.4052</b>	<b>1.6655</b>	<b>16,218.09 18</b>	<b>16,218.09 18</b>	<b>0.8288</b>	<b>3.3900e-003</b>	<b>16,239.82 22</b>	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	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

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	186.00	73.00	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	37.00	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 Site Preparation - 2017****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	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	5,836.384 0	5,836.384 0	1.7883			5,881.090 5	
Total	6.4558	77.1413	25.0818	0.0570	20.1873	3.3769	23.5642	10.1597	3.1068	13.2665		5,836.384 0	5,836.384 0	1.7883			5,881.090 5

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.2 Site Preparation - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563	

#### 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	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	
Total	6.4558	77.1413	25.0818	0.0570	7.8730	3.3769	11.2500	3.9623	3.1068	7.0691	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.2 Site Preparation - 2017****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	211.2566	211.2566	7.9900e-003			211.4563	
Total	0.1184	0.0875	0.9330	2.1200e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		211.2566	211.2566	7.9900e-003		211.4563	

**3.3 Grading - 2017****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	6.4958	80.3726	39.5958	0.0715		3.3219	3.3219		3.0561	3.0561	7,315.603 3	7,315.603 3	2.2415			7,371.640 5	
Total	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	13.0557	3.7110	3.0561	6.7672		7,315.603 3	7,315.603 3	2.2415		7,371.640 5	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003	234.9514			

#### 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	7,315.603	7,315.603	2.2415	7,371.640	
Off-Road	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	3.3219	3.0561	3.0561	0.0000	7,315.603	7,315.603	2.2415			5	
Total	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	7.1181	1.4473	3.0561	4.5034	0.0000	7,315.603	7,315.603	2.2415		7,371.640	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	234.7296	234.7296	8.8800e-003		234.9514		
Total	0.1316	0.0972	1.0367	2.3600e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		234.7296	234.7296	8.8800e-003		234.9514	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123		2,861.887 4		
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3681	9.4516	2.7074	0.0187	0.4672	0.0827	0.5499	0.1345	0.0791	0.2136	1,983.634 6	1,983.634 6	0.1568		1,987.554 8		
Worker	1.2235	0.9037	9.6408	0.0220	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,182.984 8	2,182.984 8	0.0825		2,185.048 4		
Total	1.5916	10.3552	12.3482	0.0406	2.5463	0.0998	2.6461	0.6859	0.0949	0.7808	4,166.619 4	4,166.619 4	0.2394		4,172.603 2		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

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### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3242	8.8612	2.4456	0.0186	0.4672	0.0656	0.5329	0.1345	0.0628	0.1973	1,976.522 0	1,976.522 0	0.1487	1,980.240 4			
Worker	1.0897	0.7872	8.4462	0.0213	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,121.663 3	2,121.663 3	0.0724	2,123.473 3			
Total	1.4139	9.6484	10.8918	0.0399	2.5463	0.0822	2.6285	0.6859	0.0781	0.7639	4,098.185 3	4,098.185 3	0.2211			4,103.713 7	

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142			2,311.943 2

3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	<b>0.0879</b>	<b>0.0635</b>	<b>0.6811</b>	<b>1.7200e-003</b>	<b>0.1677</b>	<b>1.3400e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2300e-003</b>	<b>0.0457</b>		<b>171.1019</b>	<b>171.1019</b>	<b>5.8400e-003</b>		<b>171.2479</b>	

**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	1.6437	17.5209	14.7964	0.0228			0.9561	0.9561		0.8797	0.8797	0.0000	2,294.088 7	2,294.088 7	0.7142		2,311.943 2
Paving	0.4834						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Total	<b>2.1271</b>	<b>17.5209</b>	<b>14.7964</b>	<b>0.0228</b>			<b>0.9561</b>	<b>0.9561</b>		<b>0.8797</b>	<b>0.8797</b>	<b>0.0000</b>	<b>2,294.088 7</b>	<b>2,294.088 7</b>	<b>0.7142</b>		<b>2,311.943 2</b>

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	171.1019	171.1019	5.8400e-003			171.2479	
Total	0.0879	0.0635	0.6811	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		171.1019	171.1019	5.8400e-003		171.2479	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	422.0513	422.0513	0.0144			422.4114	
Total	0.2168	0.1566	1.6802	4.2400e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		422.0513	422.0513	0.0144		422.4114	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Mitigated	1.8215	51.0254	13.4256	0.1504	4.4747	0.4111	4.8858	1.2603	0.3932	1.6536	16,032.92	16,032.92	0.8248			16,053.54	
Unmitigated	1.8215	51.0254	13.4256	0.1504	4.4747	0.4111	4.8858	1.2603	0.3932	1.6536	16,032.92	16,032.92	0.8248			16,053.54	
											87	87				93	

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	134.40	134.40	134.40	1,824,922	1,824,922	1,824,922	1,824,922
Total	134.40	134.40	134.40	1,824,922	1,824,922	1,824,922	1,824,922

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Winter

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3100 Milliken Avenue**  
**South Coast AQMD Air District, Summer**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	280.00	1000sqft	15.80	280,000.00	0
Parking Lot	410.00	Space	3.69	164,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	10			Operational Year	2018
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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

## Project Characteristics -

Land Use - Based on Project site plan

Construction Phase - Based on an Opening Year of 2018

Off-road Equipment - Based on an 8 hour work day

Off-road Equipment - Based on an 8 hour work day

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

Grading -

Architectural Coating - No more than 50 gram/liter of VOC

Vehicle Trips - Trucks only

Construction Off-road Equipment Mitigation -

Fleet Mix - Passenger cars only

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
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	300.00	240.00
tblFleetMix	FleetMixLandUseSubType	Unrefrigerated Warehouse-No Rail	Parking Lot
tblFleetMix	FleetMixLandUseSubType	Parking Lot	Unrefrigerated Warehouse-No Rail
tblFleetMix	HHD	0.03	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.20	0.00
tblFleetMix	LHD1	0.02	0.17

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

tblFleetMix	LHD2	5.8790e-003	0.00
tblFleetMix	MCY	4.6560e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.0290e-003	0.00
tblFleetMix	MHD	0.02	0.23
tblFleetMix	OBUS	1.9580e-003	0.00
tblFleetMix	SBUS	7.0200e-004	0.00
tblFleetMix	UBUS	2.1130e-003	0.00
tblLandUse	LotAcreage	6.43	15.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	ST_TR	1.68	0.48
tblVehicleTrips	SU_TR	1.68	0.48
tblVehicleTrips	WD_TR	1.68	0.48

**2.0 Emissions Summary**

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3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	6.6169	80.4613	40.7356	0.0740	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.9986 7,112.9986	7,112.9986 7,112.9986	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4613	40.7356	0.0740	20.3885	3.3786	23.7671	10.2131	3.1083	13.3214	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0

### 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					
2017	6.6169	80.4613	40.7356	0.0740	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0
2018	66.6278	34.7938	30.3077	0.0707	2.5463	1.6878	4.2341	0.6859	1.5853	2.2711	0.0000	7,112.9986 7,112.9986	7,112.9986 7,112.9986	0.9170	0.0000	7,135.923 9
Maximum	66.6278	80.4613	40.7356	0.0740	8.0742	3.3786	11.4528	4.0156	3.1083	7.1239	0.0000	7,566.473 6	7,566.473 6	2.2509	0.0000	7,622.747 0

	ROG	NOx	CO	SO2	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	53.69	0.00	43.98	56.86	0.00	39.75	0.00	0.00	0.00	0.00	0.00	0.00

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	1.7988	49.6462	13.0559	0.1515	4.4747	0.4091	4.8838	1.2603	0.3913	1.6517	16,158.20 60	16,158.20 60	0.8041			16,178.30 77
Total	8.1483	49.8010	13.2569	0.1525	4.4747	0.4211	4.8958	1.2603	0.4033	1.6636	16,343.36 91	16,343.36 91	0.8080	3.3900e-003		16,364.58 06

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
Energy	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003		186.1115
Mobile	1.7988	49.6462	13.0559	0.1515	4.4747	0.4091	4.8838	1.2603	0.3913	1.6517	16,158.20 60	16,158.20 60	0.8041			16,178.30 77
Total	8.1483	49.8010	13.2569	0.1525	4.4747	0.4211	4.8958	1.2603	0.4033	1.6636	16,343.36 91	16,343.36 91	0.8080	3.3900e-003		16,364.58 06

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	10/1/2017	10/13/2017	5	10	
2	Grading	Grading	10/14/2017	11/24/2017	5	30	
3	Building Construction	Building Construction	11/25/2017	10/26/2018	5	240	
4	Paving	Paving	10/27/2018	11/23/2018	5	20	
5	Architectural Coating	Architectural Coating	11/24/2018	12/21/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 105

Acres of Paving: 3.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 420,000; Non-Residential Outdoor: 140,000; Striped Parking Area: 9,840 (Architectural Coating – sqft)

#### OffRoad Equipment

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	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

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
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	186.00	73.00	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	37.00	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 Site Preparation - 2017****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	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	5,836.384 0	5,836.384 0	1.7883			5,881.090 5	
Total	6.4558	77.1413	25.0818	0.0570	20.1873	3.3769	23.5642	10.1597	3.1068	13.2665		5,836.384 0	5,836.384 0	1.7883			5,881.090 5

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.2 Site Preparation - 2017****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549		225.7832	225.7832	8.5100e-003		225.9959	

**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	5,836.3840	5,836.3840	1.7883	5,881.0905	
Off-Road	6.4558	77.1413	25.0818	0.0570		3.3769	3.3769		3.1068	3.1068	0.0000						
Total	6.4558	77.1413	25.0818	0.0570	7.8730	3.3769	11.2500	3.9623	3.1068	7.0691	0.0000	5,836.3840	5,836.3840	1.7883		5,881.0905	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.2 Site Preparation - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			
Total	0.1090	0.0798	1.0259	2.2700e-003	0.2012	1.6600e-003	0.2029	0.0534	1.5300e-003	0.0549	225.7832	225.7832	8.5100e-003	225.9959			

### 3.3 Grading - 2017

#### 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	7,315.603	7,315.603	2.2415	7,371.640	
Off-Road	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	3.3219	3.0561	3.0561	6.7672	7,315.603	7,315.603	2.2415		7,371.640		
Total	6.4958	80.3726	39.5958	0.0715	9.7338	3.3219	13.0557	3.7110	3.0561	6.7672	7,315.603	7,315.603	2.2415		7,371.640		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

#### 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	6.4958	80.3726	39.5958	0.0715		3.3219	3.3219		3.0561	3.0561	0.0000	7,315.6033	7,315.6033	2.2415		7,371.6405	
Total	6.4958	80.3726	39.5958	0.0715	3.7962	3.3219	7.1181	1.4473	3.0561	4.5034	0.0000	7,315.6033	7,315.6033	2.2415		7,371.6405	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.3 Grading - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610	250.8703	250.8703	9.4500e-003			251.1065	
Total	0.1211	0.0887	1.1399	2.5200e-003	0.2236	1.8400e-003	0.2254	0.0593	1.7000e-003	0.0610		250.8703	250.8703	9.4500e-003		251.1065	

### 3.4 Building Construction - 2017

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	2,844.080 2	2,844.080 2	0.7123			2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984		2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

#### 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	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000 2	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	
Total	3.3165	28.6789	19.4324	0.0288		1.9175	1.9175		1.7984	1.7984	0.0000	2,844.080 2	2,844.080 2	0.7123		2,861.887 4	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2017

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3533	9.4226	2.4494	0.0192	0.4672	0.0815	0.5487	0.1345	0.0779	0.2125	2,039.955 1	2,039.955 1	0.1461		2,043.608 2		
Worker	1.1260	0.8246	10.6007	0.0235	2.0790	0.0172	2.0962	0.5514	0.0158	0.5672	2,333.093 5	2,333.093 5	0.0879		2,335.290 6		
Total	1.4793	10.2472	13.0501	0.0427	2.5463	0.0986	2.6449	0.6859	0.0938	0.7797	4,373.048 5	4,373.048 5	0.2340		4,378.898 8		

### 3.4 Building Construction - 2018

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	2,810.800 8	2,810.800 8	0.7012		2,828.331 7		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

#### 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	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000 8	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	
Total	2.8506	25.2288	18.7719	0.0288		1.6066	1.6066		1.5082	1.5082	0.0000	2,810.800 8	2,810.800 8	0.7012		2,828.331 7	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.4 Building Construction - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3106	8.8465	2.2031	0.0191	0.4672	0.0646	0.5319	0.1345	0.0618	0.1963	2,034.203 7	2,034.203 7	0.1385		2,037.664 8		
Worker	1.0022	0.7185	9.3327	0.0228	2.0790	0.0166	2.0956	0.5514	0.0153	0.5667	2,267.994 1	2,267.994 1	0.0773		2,269.927 4		
Total	1.3128	9.5650	11.5358	0.0419	2.5463	0.0812	2.6275	0.6859	0.0771	0.7630	4,302.197 7	4,302.197 7	0.2158		4,307.592 2		

### 3.5 Paving - 2018

#### 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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.9432		
Paving	0.4834					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000		
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	2,294.088 7	2,294.088 7	0.7142		2,311.943 2		

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**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	1.6437	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	
Paving	0.4834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	2.1271	17.5209	14.7964	0.0228		0.9561	0.9561		0.8797	0.8797	0.0000	2,294.0887	2,294.0887	0.7142		2,311.9432	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

**3.5 Paving - 2018****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457	182.9028	182.9028	6.2400e-003			183.0587	
Total	0.0808	0.0580	0.7526	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2300e-003	0.0457		182.9028	182.9028	6.2400e-003		183.0587	

**3.6 Architectural Coating - 2018****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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007		375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

#### 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	66.0302						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.3982	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	
Total	66.4284	2.6743	2.4723	3.9600e-003		0.2007	0.2007		0.2007	0.2007	0.0000	375.2647	375.2647	0.0357		376.1562	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

### 3.6 Architectural Coating - 2018

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127	451.1601	451.1601	0.0154			451.5447	
Total	0.1994	0.1429	1.8565	4.5300e-003	0.4136	3.3000e-003	0.4169	0.1097	3.0400e-003	0.1127		451.1601	451.1601	0.0154		451.5447	

## 4.0 Operational Detail - Mobile

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### 4.1 Mitigation Measures Mobile

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Mitigated	1.7988	49.6462	13.0559	0.1515	4.4747	0.4091	4.8838	1.2603	0.3913	1.6517	16,158.20	16,158.20	0.8041		16,178.30		
Unmitigated	1.7988	49.6462	13.0559	0.1515	4.4747	0.4091	4.8838	1.2603	0.3913	1.6517	16,158.20	16,158.20	0.8041		16,178.30		

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	134.40	134.40	134.40	1,824,922	1,824,922	1,824,922	1,824,922
Total	134.40	134.40	134.40	1,824,922	1,824,922	1,824,922	1,824,922

**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 Rail	40.00	8.40	6.90	100.00	0.00	0.00	92	5	3

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.170000	0.000000	0.230000	0.600000	0.000000	0.000000	0.000000	0.000000	0.000000

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.0 Energy Detail

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
NaturalGas Unmitigated	0.0170	0.1542	0.1295	9.3000e-004			0.0117	0.0117		0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	

3100 Milliken Avenue - South Coast AQMD Air District, Summer

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1572.6	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

### 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	0.0000
Unrefrigerated Warehouse-No Rail	1.5726	0.0170	0.1542	0.1295	9.3000e-004		0.0117	0.0117		0.0117	0.0117	185.0121	185.0121	3.5500e-003	3.3900e-003	186.1115	
<b>Total</b>		<b>0.0170</b>	<b>0.1542</b>	<b>0.1295</b>	<b>9.3000e-004</b>		<b>0.0117</b>	<b>0.0117</b>		<b>0.0117</b>	<b>0.0117</b>		<b>185.0121</b>	<b>185.0121</b>	<b>3.5500e-003</b>	<b>3.3900e-003</b>	<b>186.1115</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

## 3100 Milliken Avenue - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	
Unmitigated	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614	

**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	0.7236					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.1510	0.1510	4.1000e-004			0.1614
<b>Total</b>	<b>6.3325</b>	<b>6.7000e-004</b>	<b>0.0714</b>	<b>1.0000e-005</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>2.6000e-004</b>	<b>2.6000e-004</b>		<b>0.1510</b>	<b>0.1510</b>	<b>4.1000e-004</b>		<b>0.1614</b>

3100 Milliken Avenue - South Coast AQMD Air District, 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	0.7236						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	5.6021						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	6.8300e-003	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614
Total	6.3325	6.7000e-004	0.0714	1.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004		0.1510	0.1510	4.1000e-004		0.1614

## 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

3100 Milliken Avenue - South Coast AQMD Air District, 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:**

**STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS**

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

Criteria Pollutant	Averaging Time	Designation <sup>a</sup>	Attainment Date <sup>b</sup>
Ozone ( $O_3$ )	(1979) <b>1-Hour</b> (0.12 ppm) <sup>c</sup>	Nonattainment ("extreme")	2/26/2023 (revised deadline)
	(2015) <b>8-Hour</b> (0.070 ppm) <sup>d</sup>	Pending – Expect Nonattainment ("extreme")	Pending (beyond 2032)
	(2008) <b>8-Hour</b> (0.075 ppm) <sup>d</sup>	Nonattainment ("extreme")	7/20/2032
	(1997) <b>8-Hour</b> (0.08 ppm) <sup>d</sup>	Nonattainment ("extreme")	6/15/2024
PM2.5 <sup>e</sup>	(2006) <b>24-Hour</b> (35 $\mu\text{g}/\text{m}^3$ )	Nonattainment ("serious")	12/31/2019
	(2012) <b>Annual</b> (12.0 $\mu\text{g}/\text{m}^3$ )	Nonattainment ("moderate")	12/31/2021
	(1997) <b>Annual</b> (15.0 $\mu\text{g}/\text{m}^3$ )	Attainment (final determination pending)	4/5/2015 (attained 2013)
PM10 <sup>f</sup>	(1987) <b>24-hour</b> (150 $\mu\text{g}/\text{m}^3$ )	Attainment (Maintenance)	7/26/2013 (attained)
Lead (Pb) <sup>g</sup>	(2008) <b>3-Months Rolling</b> (0.15 $\mu\text{g}/\text{m}^3$ )	Nonattainment (Partial) (Attainment determination to be requested)	12/31/2015
CO	(1971) <b>1-Hour</b> (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	(1971) <b>8-Hour</b> (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
NO <sub>2</sub> <sup>h</sup>	(2010) <b>1-Hour</b> (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	(1971) <b>Annual</b> (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
SO <sub>2</sub> <sup>i</sup>	(2010) <b>1-Hour</b> (75 ppb)	Designations Pending (expect Unclassifiable/Attainment)	N/A (attained)
	(1971) <b>24-Hour</b> (0.14 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
	(1971) <b>Annual</b> (0.03 ppm)		

- a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
- b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for an attainment demonstration
- c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective 6/15/05 ; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard; original attainment date was 11/15/2010; the revised attainment date is 2/6/23
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone NAAQS implementation rule, effective 4/6/15; there are continuing obligations under the revoked 1997 and revised 2008 ozone NAAQS until they are attained
- e) The attainment deadline for the 2006 24-hour PM2.5 NAAQS was 12/31/15 for the former "moderate" classification; U.S.EPA approved reclassification to "serious," effective 2/12/16 with an attainment deadline of 12/31/2019; the 2012 (proposal year) annual PM2.5 NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12  $\mu\text{g}/\text{m}^3$ ; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 U.S. EPA finalized a determination that the Basin attained the 1997 annual (15.0  $\mu\text{g}/\text{m}^3$ ) and 24-hour PM2.5 (65  $\mu\text{g}/\text{m}^3$ ) NAAQS, effective August 24, 2016
- f) The annual PM10 NAAQS was revoked, effective 12/18/06; the 24-hour PM10 NAAQS deadline was 12/31/2006; the Basin's Attainment Re-designation Request and PM10 Maintenance Plan was approved by U.S. EPA on 6/26/13, effective 7/26/13
- g) Partial Nonattainment designation – Los Angeles County portion of the Basin only for near-source monitors; expect to remain in attainment based on current monitoring data; attainment re-designation request pending
- h) New 1-hour NO<sub>2</sub> NAAQS became effective 8/2/10, with attainment designations 1/20/12; annual NO<sub>2</sub> NAAQS retained
- i) The 1971 annual and 24-hour SO<sub>2</sub> NAAQS were revoked, effective 8/23/10; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO<sub>2</sub> 1-hour NAAQS; final area designations expected by 12/31/20 due to new source-specific monitoring requirements; Basin expected to be in attainment due to ongoing clean data

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

Criteria Pollutant	Averaging Time	Designation <sup>a</sup>	Attainment Date <sup>b</sup>
<b>Ozone (O<sub>3</sub>)</b>	(1979) <b>1-Hour</b> (0.12 ppm) <sup>c</sup>	Attainment	11/15/2007 (attained 12/31/2013)
	(2015) <b>8-Hour</b> (0.070 ppm) <sup>d</sup>	Pending – Expect Nonattainment (Severe)	Pending
	(2008) <b>8-Hour</b> (0.075 ppm) <sup>d</sup>	Nonattainment (Severe-15)	7/20/2027
	(1997) <b>8-Hour</b> (0.08 ppm) <sup>d</sup>	Nonattainment (Severe-15)	6/15/2019
<b>PM2.5<sup>e</sup></b>	(2006) <b>24-Hour</b> (35 µg/m <sup>3</sup> )	Unclassifiable/Attainment	N/A (attained)
	(2012) <b>Annual</b> (12.0 µg/m <sup>3</sup> )	Unclassifiable/Attainment	N/A (attained)
	(1997) <b>Annual</b> (15.0 µg/m <sup>3</sup> )	Unclassifiable/Attainment	N/A (attained)
<b>PM10<sup>f</sup></b>	(1987) <b>24-hour</b> (150 µg/m <sup>3</sup> )	Nonattainment ("serious")	12/31/2006
<b>Lead (Pb)</b>	(2008) <b>3-Months Rolling</b> (0.15 µg/m <sup>3</sup> )	Unclassifiable/Attainment	Unclassifiable/ Attainment
<b>CO</b>	(1971) <b>1-Hour</b> (35 ppm)	Unclassifiable/Attainment	N/A (attained)
	(1971) <b>8-Hour</b> (9 ppm)	Unclassifiable/Attainment	N/A (attained)
<b>NO<sub>2</sub><sup>g</sup></b>	(2010) <b>1-Hour</b> (100 ppb)	Unclassifiable/Attainment	N/A (attained)
	(1971) <b>Annual</b> (0.053 ppm)	Unclassifiable/Attainment	N/A (attained)
<b>SO<sub>2</sub><sup>h</sup></b>	(2010) <b>1-Hour</b> (75 ppb)	Designations Pending	N/A
	(1971) <b>24-Hour</b> (0.14 ppm)	Unclassifiable/Attainment	Unclassifiable/ Attainment
	(1971) <b>Annual</b> (0.03 ppm)		

a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable

b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for an attainment demonstration

c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective 6/15/05; the Southeast Desert Modified Air Quality Management Area, including the Coachella Valley, had not timely attained this standard by the 11/15/07 "severe-17" deadline, based on 2005-2007 data; on 8/25/14, U.S. EPA proposed a clean data finding based on 2011–2013 data and a determination of attainment for the former 1-hour ozone NAAQS for the Southeast Desert nonattainment area; this rule was finalized by U.S. EPA on 4/15/15, effective 5/15/15, that included preliminary 2014 data

d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone NAAQS implementation rule, effective 4/6/15; there are continuing obligations under the 1997 and 2008 ozone NAAQS until they are attained

e) The annual PM2.5 standard was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m<sup>3</sup>

f) The annual PM10 standard was revoked, effective 12/18/06; the 24-hour PM10 NAAQS attainment deadline was 12/31/2006; the Coachella Valley Attainment Re-designation Request and PM10 Maintenance Plan was postponed by U.S. EPA pending additional monitoring and analysis in the southeastern Coachella Valley

g) New 1-hour NO<sub>2</sub> NAAQS became effective 8/2/10; attainment designations 1/20/12; annual NO<sub>2</sub> NAAQS retained

h) The 1971 Annual and 24-hour SO<sub>2</sub> NAAQS were revoked, effective 8/23/10; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO<sub>2</sub> 1-hour standard; final area designations expected by 12/31/2020 with SSAB expected to be designated Unclassifiable/Attainment

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

**TABLE 2-5**

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

Pollutant	Averaging Time and Level <sup>b</sup>	Designation <sup>a</sup>	
		South Coast Air Basin	Coachella Valley
Ozone (O <sub>3</sub> )	1-Hour (0.09 ppm) <sup>c</sup>	Nonattainment	Nonattainment
	8-Hour (0.070 ppm) <sup>d</sup>	Nonattainment	Nonattainment
PM2.5	Annual (12.0 µg/m <sup>3</sup> )	Nonattainment	Attainment
PM10	24-Hour (50 µg/m <sup>3</sup> )	Nonattainment	Nonattainment
	Annual (20 µg/m <sup>3</sup> )	Nonattainment	Nonattainment
Lead (Pb)	30-Day Average (1.5 µg/m <sup>3</sup> )	Attainment	Attainment
CO	1-Hour (20 ppm)	Attainment	Attainment
	8-Hour (9.0 ppm)	Attainment	Attainment
NO <sub>2</sub>	1-Hour (0.18 ppm)	Attainment	Attainment
	Annual (0.030 ppm)	Attainment	Attainment
SO <sub>2</sub>	1-Hour (0.25 ppm)	Attainment	Attainment
	24-Hour (0.04 ppm)	Attainment	Attainment
Sulfates	24-Hour (25 µg/m <sup>3</sup> )	Attainment	Attainment
H <sub>2</sub> S <sup>c</sup>	1-Hour (0.03 ppm)	Unclassified	Unclassified <sup>c</sup>

- a) CA State designations shown were updated by CARB in 2016, based on the 2013–2015 3-year period; stated designations are based on a 3-year data period after consideration of outliers and exceptional events; Source: <http://www.arb.ca.gov/desig/statedesig.htm#current>
- b) CA State standards, or CAAQS, for ozone, CO, SO<sub>2</sub>, NO<sub>2</sub>, PM10 and PM2.5 are values not to be exceeded; lead, sulfates, and H<sub>2</sub>S standards are values not to be equaled or exceeded; CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations
- c) SCAQMD began monitoring H<sub>2</sub>S in the southeastern Coachella Valley in November 2013 due to odor events related to the Salton Sea; three full years of data are not yet available for a State designation, but nonattainment is anticipated for the H<sub>2</sub>S CAAQS in at least part of the Coachella Valley

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