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# **Rancho Diamante (Tentative Tract Map No. 36841)**

**AIR QUALITY IMPACT ANALYSIS**

**CITY OF HEMET**

PREPARED BY:

Haseeb Qureshi  
hqureshi@urbanxroads.com  
(949) 336-5987

Alyssa Tamase  
atamase@urbanxroads.com  
(949) 336-5988

JULY 19, 2018



## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>I</b>
<b>APPENDICES</b> .....	<b>II</b>
<b>LIST OF EXHIBITS</b> .....	<b>II</b>
<b>LIST OF TABLES</b> .....	<b>II</b>
<b>LIST OF ABBREVIATED TERMS</b> .....	<b>III</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>1</b>
Summary of CEQA Significance Findings & Mitigation Measures .....	1
<b>1 INTRODUCTION</b> .....	<b>2</b>
1.1 Site Location.....	2
1.2 Project Description.....	2
1.3 Project Design Features .....	5
1.4 Standard Regulatory Requirements/Best Available Control Measures (BACMs).....	5
1.5 Construction-Source Mitigation Measures.....	6
1.6 Operational-Source Mitigation Measures .....	6
<b>2 AIR QUALITY SETTING</b> .....	<b>7</b>
2.1 South Coast Air Basin .....	7
2.2 Regional Climate .....	7
2.3 Wind Patterns and Project Location .....	9
2.4 Existing Air Quality .....	9
2.5 Regional Air Quality .....	12
2.6 Local Air Quality .....	12
2.7 Regulatory Background.....	18
2.8 Existing Project Site Air Quality Conditions .....	19
<b>3 PROJECT AIR QUALITY IMPACT</b> .....	<b>21</b>
3.1 Introduction .....	21
3.2 Standards of Significance .....	21
3.3 California Emissions Estimator Model™ Employed to Estimate AQ Emissions .....	22
3.4 Construction Emissions.....	22
3.5 Operational Emissions .....	26
3.6 Localized Significance - Construction Activity .....	29
3.7 Localized Significance – Long-Term Operational Activity .....	36
3.8 CO “Hot Spot” Analysis .....	36
3.9 Air Quality Management Planning.....	38
3.10 Potential Impacts to Sensitive Receptors .....	40
3.11 Odors.....	41
3.12 Cumulative Impacts .....	41
<b>4 FINDINGS &amp; CONCLUSIONS</b> .....	<b>47</b>
Construction-Source Emissions .....	47
Operational-Source Emissions.....	47
<b>5 REFERENCES</b> .....	<b>49</b>
<b>6 CERTIFICATION</b> .....	<b>52</b>

**APPENDICES**

APPENDIX 2.1: STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS  
 APPENDIX 3.1: CALEEMOD CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS  
 APPENDIX 3.2: CALEEMOD CONSTRUCTION (MITIGATED) EMISSIONS MODEL OUTPUTS  
 APPENDIX 3.3: CALEEMOD OPERATIONS (PHASE 1) EMISSIONS MODEL OUTPUTS  
 APPENDIX 3.4: CALEEMOD OPERATIONS (PHASE 2) EMISSIONS MODEL OUTPUTS  
 APPENDIX 3.5: LST ANALYSIS

**LIST OF EXHIBITS**

EXHIBIT 1-A: LOCATION MAP.....3  
 EXHIBIT 1-B: SITE PLAN.....4

**LIST OF TABLES**

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS .....1  
 TABLE 2-1: AMBIENT AIR QUALITY STANDARDS (1 OF 2)..... 10  
 TABLE 2-1: AMBIENT AIR QUALITY STANDARDS (1 OF 2)..... 11  
 TABLE 2-2: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN (SCAB) 12  
 TABLE 2-3: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2014-2016..... 13  
 TABLE 3-1: MAXIMUM DAILY EMISSIONS THRESHOLDS (1 OF 2) ..... 21  
 TABLE 3-1: MAXIMUM DAILY EMISSIONS THRESHOLDS (2 OF 2) ..... 22  
 TABLE 3-2: CONSTRUCTION DURATION..... 23  
 TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS ..... 24  
 TABLE 3-4: EMISSIONS SUMMARY OF OVERALL CONSTRUCTION (WITHOUT MITIGATION)..... 25  
 TABLE 3-5: EMISSIONS SUMMARY OF OVERALL CONSTRUCTION (WITH MITIGATION) ..... 26  
 TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS ..... 28  
 TABLE 3-7: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY ..... 28  
 (UNMITIGATED, 1 OF 2)..... 28  
 TABLE 3-7: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY ..... 29  
 (UNMITIGATED, 2 OF 2)..... 29  
 TABLE 3-8: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY (MITIGATED) ..... 29  
 TABLE 3-9 : MAXIMUM DAILY DISTURBED-ACREAGE ..... 31  
 TABLE 3-10: LST SUMMARY (ROUGH GRADING WITHOUT MITIGATION)..... 34  
 TABLE 3-11: LST SUMMARY (FINE GRADING WITHOUT MITIGATION)..... 35  
 TABLE 3-12: LST SUMMARY (ROUGH GRADING WITH MITIGATION)..... 35  
 TABLE 3-13: LST SUMMARY (FINE GRADING WITH MITIGATION) ..... 35  
 TABLE 3-14: CO MODEL RESULTS ..... 36  
 TABLE 3-15: TRAFFIC VOLUMES ..... 37  
 TABLE 3-16: PEAK TRAFFIC VOLUMES ..... 38  
 TABLE 3-17: CUMULATIVE IMPACTS..... 43

## **LIST OF ABBREVIATED TERMS**

(1)	Reference
µg/m <sup>3</sup>	Microgram per Cubic Meter
AADT	Annual Average Daily Trips
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BACM	Best Available Control Measures
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
EPA	Environmental Protection Agency
LST	Localized Significance Threshold
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	Nitrogen Dioxide
NO <sub>x</sub>	Oxides of Nitrogen
Pb	Lead
PM <sub>10</sub>	Particulate Matter 10 microns in diameter or less
PM <sub>2.5</sub>	Particulate Matter 2.5 microns in diameter or less
PPM	Parts Per Million
Project	Rancho Diamante (Tentative Tract Map No. 36841)
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
VPH	Vehicles Per Hour

## EXECUTIVE SUMMARY

### SUMMARY OF CEQA SIGNIFICANCE FINDINGS & MITIGATION MEASURES

The results of this Rancho Diamante (Tentative Tract Map No. 36841) Air Quality Impact Analysis are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation measures described below.

#### CONSTRUCTION MITIGATION MEASURES

The Project would not result in any significant impacts, thus no mitigation is required.

#### OPERATIONAL MITIGATION MEASURES

For regional emissions, the Project has the potential to exceed the threshold of significance for emissions of NO<sub>x</sub>. It is important to note that the majority of NO<sub>x</sub> emissions are derived from vehicle usage. Since the Project does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NO<sub>x</sub> emissions to levels that are less-than-significant, thus these emissions are considered significant and unavoidable.

**TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS**

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





# 1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the Rancho Diamante (Tentative Tract Map No. 36841) (referred to as “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 established regulatory thresholds.

## 1.1 SITE LOCATION

The proposed Rancho Diamante (Tentative Tract Map No. 36841) Project is located on the southwest corner of Warren Road and the new Stetson Avenue extension in the City of Hemet, as shown on Exhibit 1-A. State Route 79 (SR-79) is located approximately 1.75 miles west of the Project site, and State Route 74 (SR-74) is located roughly 1.5 miles to the north of the Project site. Existing residential land uses in the Project study area are located north on Stetson Avenue, east of Warren Road, and west on California Avenue. Agriculture land uses are located south of the Project site on Warren Road. The Hemet-Ryan Airport is located approximately 0.5 miles northeast of the Project site on Stetson Avenue. An existing Burlington Northern Santa Fe (BNSF) railroad line is located north of the Project site adjacent to the future Stetson Avenue extension.

## 1.2 PROJECT DESCRIPTION

The Project is proposed to include the development of up to 588 single-family detached residential dwelling units and approximately 100,000 square feet of neighborhood commercial retail use, as shown on Exhibit 1-B. For the purposes of this analysis, potential impacts have been assessed for two development phases. The two phases and their anticipated opening years are as follows:

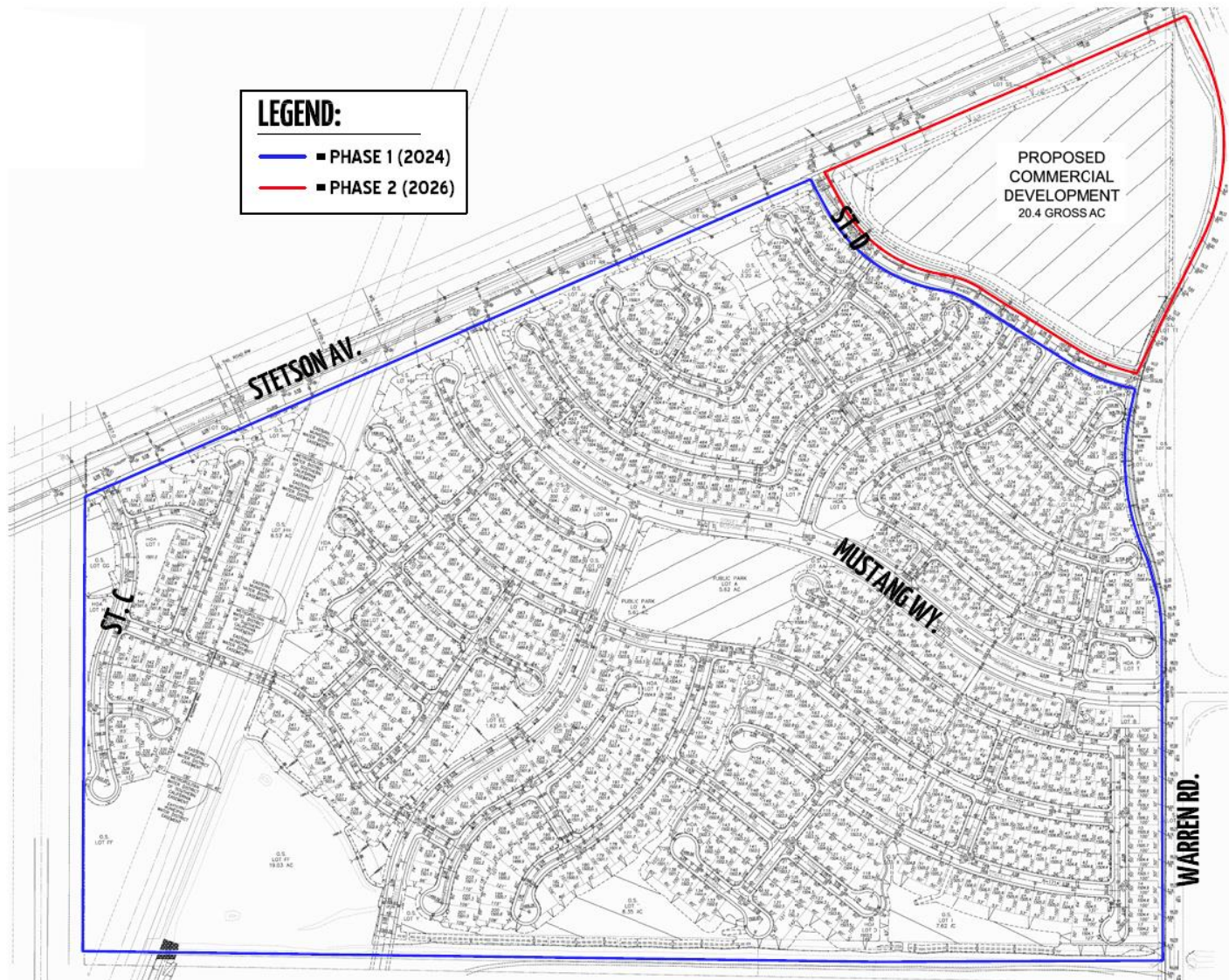
- Phase 1 (2024) – 588 single-family residential dwelling units;
- Phase 2 (2026) – 100,000 square feet of neighborhood retail.

EXHIBIT 1-A: LOCATION MAP





EXHIBIT 1-B: SITE PLAN



### 1.3 PROJECT DESIGN FEATURES

Energy-saving and sustainable design features and operational programs would be incorporated into facilities developed pursuant to the Rancho Diamante (Tentative Tract Map No. 36841). The Project also incorporates and expresses the following design features and attributes promoting energy efficiency and sustainability. Because these features/attributes are integral to the Project, and/or are regulatory requirements, they are not considered to be mitigation measures.

- Regional vehicle miles traveled (VMT) and associated vehicular-source emissions are reduced by the following Project design features/attributes:
  - Pedestrian connections shall be provided to surrounding areas consistent with the City's General Plan. Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. The Project would provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site. The Project would minimize barriers to pedestrian access and interconnectivity.
  - The Project's proposed collocation of varied residential, park, and open spaces within ¼ mile proximity together with supporting amenities would tend to decrease the propensity for vehicle travel for local residents.
- Design Building Components to Meet 2019 Title 24 Standards. The project will design building shells and building components, such as windows; roof systems: electrical and lighting systems: and heating, ventilating, and air conditioning systems to meet 2019 Title 24 Standards which expects 30% less energy use due to lighting upgrades.
- To reduce water demands and associated energy use, subsequent development proposals within the Project site would be required to implement a Water Conservation Strategy and demonstrate a minimum 25% reduction in water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). The 25% reduction in water usage is a goal of the City of Hemet through implementation of Emergency Order 2014-0718-01E<sup>1</sup>.
- In order to reduce the amount of waste disposed at landfills, the Project would be required to implement a 50% waste diversion as required by AB 939.

### 1.4 STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMs)

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

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (2); Rule 431.2 (Low Sulfur Fuel); Rule

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<sup>1</sup> Emergency Order 2014-07-18-01E mandates water supplies enact certain water restrictions.

403 (Fugitive Dust) (3); and Rule 1186 / 1186.1 (Street Sweepers) (4). It should be noted that BACMs are not mitigation as they are standard regulatory requirements.

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

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 403 (4):

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

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

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 1113 (5):

- In order to limit the VOC content of architectural coatings used in the SCAB, architectural coatings shall have a low VOC default level of 50 g/L unless otherwise specified in the SCAQMD Table of Standards (pg. 32-33).

### **1.5 CONSTRUCTION-SOURCE MITIGATION MEASURES**

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

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

### **1.6 OPERATIONAL-SOURCE MITIGATION MEASURES**

For regional emissions, the Project has the potential to exceed the threshold of significance for emissions of NO<sub>x</sub>. It is important to note that the majority of NO<sub>x</sub> emissions are derived from vehicle usage. Since the Project does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NO<sub>x</sub> emissions to levels that are less-than-significant, thus these emissions are considered significant and unavoidable.

## 2 AIR QUALITY SETTING

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

### 2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (6). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As discussed above, the Project site is located within the South Coast Air Basin, a 6,745-square mile sub-region 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 NO<sub>x</sub> 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 are shown in Table 2-1 (7).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table 2-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O<sub>3</sub>, CO (except 8-hour Lake Tahoe), SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and visible reducing particles are not to be exceeded at any time in any consecutive three-year period; all other values are not to be equaled or exceeded. The air quality in a region is considered to be in attainment by federal standards if the measured ambient air pollutant levels for O<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, 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 PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.



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 (PM <sub>10</sub> ) <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 (PM <sub>2.5</sub> ) <sup>9</sup>	24 Hour	—	—	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	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>10</sup>			—
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) <sup>10</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 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography				
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 ...

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

California Air Resources Board (10/1/15)

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

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

## 2.5 REGIONAL AIR QUALITY

The SCAQMD monitors levels of various criteria pollutants at 38 permanent monitoring stations and 5 single-pollutant source Lead (Pb) air monitoring sites throughout the air district (8). 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 (9). 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 (10) (11). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

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

Criteria Pollutant	State Designation	Federal Designation
Ozone - 1hour standard	Nonattainment	Nonattainment (“extreme”)
Ozone - 8 hour standard	Nonattainment	Nonattainment (“extreme”)
PM <sub>10</sub>	Nonattainment	Attainment (Maintenance)
PM <sub>2.5</sub>	Nonattainment	Nonattainment (“serious”)
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassifiable/Attainment
Sulfur Dioxide	Attainment	Unclassifiable/Attainment
Lead <sup>2</sup>	Attainment	Nonattainment (Partial)

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

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the South Coast Air Basin

## 2.6 LOCAL AIR QUALITY

Although the Project site is located within the Hemet/San Jacinto Valley Source Receptor Area (SRA 28) , there is no data available for air quality conditions within SRA

The Project site is located within the SCAQMD Hemet/San Jacinto Valley Source Receptor Area (SRA 28). However, since there is no available data for air quality conditions for SRA 28, the nearest long-term air quality monitoring sites will be used to determine the local air quality relative to the Project site. For Ozone (O<sub>3</sub>) and Particulate Matter ≤ 10 Microns (PM<sub>10</sub>), the nearest long-term air quality monitoring site is the SCAQMD Perris monitoring station (SRA 24), located approximately 11.50 miles southeast of the Project site (12). The nearest long-term air quality monitoring site in relation to the project for Carbon Monoxide (CO), and Nitrogen Dioxide (NO<sub>2</sub>) is carried out by the SCAQMD at the Lake Elsinore monitoring station (SRA 25) located approximately 16.05 miles southwest of the project site. Data for Ultra-Fine Particulates (PM<sub>2.5</sub>) was obtained from the SCAQMD Metropolitan Riverside County 2 monitoring station (SRA 23), located approximately 28.75 miles northwest of the project site. It should be noted

<sup>2</sup> The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

that the Lake Elsinore and Metropolitan Riverside County 2 monitoring stations were utilized in lieu of the Perris monitoring station only where data was not available from the nearest monitoring site.

The most recent three (3) years of data available is shown on Table 2-3 and identifies the number of days ambient air quality standards were exceeded for the study area, which is was considered to be representative of the local air quality at the Project site (13). 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.

**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)		0.117	0.124	0.131
Maximum 8-Hour Concentration (ppm)		0.094	0.102	0.098
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	16	25	23
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	63	50	56
Number of Days Exceeding Federal 8-Hour Standard	> 0.07 ppm	38	31	55
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		2.0	0.8	1.2
Maximum 8-Hour Concentration (ppm)		1.4	0.6	0.6
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)		0.045	0.047	0.051
Annual Arithmetic Mean Concentration (ppm)		0.008	0.009	0.02
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> )		87	74	76
Annual Arithmetic Mean (µg/m <sup>3</sup> )		35.1	30.3	32.2
Number of Samples		60	57	57
Number of Samples Exceeding State Standard	> 50 µg/m <sup>3</sup>	6	3	5
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> )		30.9	--	45.64
Annual Arithmetic Mean (µg/m <sup>3</sup> )		16.5	--	14.02
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m <sup>3</sup>	0	--	6

-- = data not available from SCAQMD

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 (SO<sub>x</sub>).
- 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.
- PM<sub>10</sub> (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. PM<sub>10</sub> also causes visibility reduction and is a criteria air pollutant.
- PM<sub>2.5</sub> (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. PM<sub>2.5</sub> 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 (PM<sub>10</sub> and PM<sub>2.5</sub>) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in PM<sub>2.5</sub> 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 PM<sub>10</sub> and PM<sub>2.5</sub>.

#### 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>, PM<sub>10</sub>, and lead (14). 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 (15). 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 (NO<sub>x</sub>). NO<sub>x</sub> 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 (16) (14).

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

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

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROG<sub>s</sub>, NO<sub>x</sub>, CO and PM<sub>10</sub>. 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 regards to the NAAQS, the Project region within the SCAB is in nonattainment for ozone (8-hour) and PM<sub>2.5</sub>. For the CAAQS, the Project region within the SCAB is in nonattainment for ozone (1-hour and 8-hour), PM<sub>10</sub>, and PM<sub>2.5</sub>. 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 3.10.

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

Existing air quality conditions at the Project site would generally reflect ambient monitored conditions as 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 criteria used to determine the significance of potential Project-related air quality impacts are taken from the Initial Study Checklist in Appendix G of the State CEQA Guidelines (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (18):

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

The SCAQMD has also developed regional and localized significance thresholds for other regulated pollutants, as summarized at Table 3-1 (19). 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 (1 OF 2)**

Pollutant	Construction	Operations
<b>Regional Thresholds</b>		
NO <sub>x</sub>	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM <sub>10</sub>	150 lbs/day	150 lbs/day
PM <sub>2.5</sub>	55 lbs/day	55 lbs/day
SO <sub>x</sub>	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Sources: SCAQMD’s CEQA Air Quality Significance Thresholds (2015)

**TABLE 3-1: MAXIMUM DAILY EMISSIONS THRESHOLDS (2 OF 2)**

Pollutant	Construction	Operations
<b>Localized Thresholds</b>		
CO (1-Hour)	20.0 ppm	20.0 ppm
CO (8-Hour)	9.0 ppm	9.0 ppm
NO <sub>2</sub>	0.18 ppm	0.18 ppm
PM <sub>10</sub>	10.4 µg/m <sup>3</sup>	2.5 µg/m <sup>3</sup>
PM <sub>2.5</sub>	10.4 µg/m <sup>3</sup>	2.5 µg/m <sup>3</sup>

### 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 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (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 (20). Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendix 3.1 to 3.4.

### 3.4 CONSTRUCTION EMISSIONS

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

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

Construction for Phase 1 is expected to commence in June 2019 and will be completed in September 2024. Phase 2 is projected to commence in September 2024 and will be completed in February 2026. The construction schedule utilized in the analysis, shown in Table 3-2, represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.<sup>3</sup> The site-specific

construction fleet assumptions, shown on Table 3-3, may vary due to specific project needs at the time of construction. The construction schedule and construction equipment assumptions utilized in this analysis were estimated based on past project experience and CalEEMod model defaults. 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 3.2 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. It is our understanding the Project will not require demolition. Based on consultation with the client, the Project site is expected require 52,300 cubic yards of soil import.

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

**TABLE 3-2: CONSTRUCTION DURATION**

Phase Name	Start Date	End Date	Days
Phase 1			
Grading (Rough)	06/03/2019	10/18/2019	100
Building Construction	10/19/2019	08/18/2023	1,000
Paving	08/19/2023	06/21/2024	220
Architectural Coating	01/19/2023	09/25/2024	440
Phase 2			
Grading (Fine)	09/26/2024	11/06/2024	30
Building Construction	11/07/2024	12/31/2025	300
Paving	01/01/2026	01/28/2026	20
Architectural Coating	01/01/2026	02/25/2026	40

<sup>3</sup> As shown in the California Emissions Estimator Model (CalEEMod) User’s Guide Version 2016.3.2, Section 4.3 “OFFROAD Equipment” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

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

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

**3.4.1 CONSTRUCTION EMISSIONS SUMMARY**

***Impacts without Mitigation***

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1403 (Asbestos); Rule 1113 (Architectural Coatings) (2); Rule 431.2 (Low Sulfur Fuel) (21); Rule 403 (Fugitive Dust) (3); and Rule 1186 / 1186.1 (Street Sweepers) (4). It should be noted that Best Available Control Measures (BACMs) are not mitigation as they are standard regulatory requirements. Notwithstanding, credit for Rule 403 and Rule 1113 have been taken as BACM AQ-1 and BACM AQ-2, respectively.

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 will exceed criteria pollutant thresholds established by the SCAQMD for emissions of NO<sub>x</sub>.

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

Year	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2019	12.96	128.06	80.09	0.34	23.21	8.97
2020	11.76	85.79	81.83	0.33	22.86	7.26
2021	10.74	77.14	75.73	0.33	22.4	6.87
2022	9.99	71.60	71.05	0.32	22.26	6.70
2023	30.50	59.56	76.35	0.34	25.70	7.58
2024	29.83	78.07	73.15	0.17	16.43	8.20
2025	1.60	14.45	18.07	0.04	1.03	0.66
2026	12.80	10.14	17.42	0.03	0.72	0.52
<b>Maximum Daily Emissions</b>	<b>30.50</b>	<b>128.06</b>	<b>89.09</b>	<b>0.34</b>	<b>25.70</b>	<b>8.97</b>
<b>SCAQMD Regional Threshold</b>	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

***Impacts with Mitigation***

The estimated maximum daily construction emissions with mitigation are summarized on Table 3-5. Detailed construction model outputs are presented in Appendix 3.2. Mitigation measure MM AQ-1 is recommended to reduce the severity of the impact. After implementation of the recommended mitigation measures, construction activity emissions will not exceed the numerical thresholds established by the SCAQMD for any criteria pollutants. Thus a less than significant impact would occur with implementation of the applicable mitigation measures.



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

Year	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2019	12.60	91.79	89.87	0.34	23.06	7.47
2020	11.45	83.14	82.79	0.33	22.74	7.16
2021	10.47	75.03	76.82	0.33	22.35	6.79
2022	9.76	70.15	72.23	0.32	22.19	6.64
2023	30.29	58.48	77.58	0.34	25.64	7.54
2024	26.33	66.93	90.81	0.17	15.87	7.85
2025	1.43	14.02	19.41	0.04	1.00	0.64
2026	12.80	10.14	17.42	0.03	0.72	0.52
<b>Maximum Daily Emissions</b>	<b>30.29</b>	<b>91.79</b>	<b>90.81</b>	<b>0.34</b>	<b>25.64</b>	<b>7.85</b>
<b>SCAQMD Regional Threshold</b>	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 VOCs, NO<sub>x</sub>, SO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Operational emissions would be expected from the following primary sources:

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

#### 3.5.1 AREA SOURCE EMISSIONS

##### Architectural Coatings

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

##### Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on assumptions provided in the CalEEMod model. In the case of the commercial uses proposed by the Project, no substantive on-site use of consumer products is anticipated.

### Hearths/Fireplaces

The emissions associated with use of hearths/fireplaces were calculated based on assumptions provided in the CalEEMod model. The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. In order to account for the requirements of this Rule, the unmitigated CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces. As the project is required to comply with SCAQMD Rule 445, the removal of wood burning stoves and fireplaces is not considered "mitigation" although it must be identified as such in CalEEMod in order to treat the case appropriately.

### 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 operational (vehicular) 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, Rancho Diamante (Tentative Tract Map No. 36841) Traffic Impact Analysis (Urban Crossroads) 2018 were utilized in this analysis. (22)

## **3.5.4 OPERATIONAL EMISSIONS SUMMARY**

The estimated operational-source emissions are summarized on Table 3-6. Detailed operation model outputs are presented in Appendix 3.3 and 3.4. Project operational-source emissions would exceed the SCAQMD regional thresholds of significance for NO<sub>x</sub>. No feasible mitigation measures or project design features beyond those already identified exist that would reduce

these emissions to levels that are less-than-significant. Project operational-source NO<sub>x</sub> emissions exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable.

**TABLE 3-6: SUMMARY OF PEAK OPERATIONAL EMISSIONS**

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	34.70	10.31	52.66	0.06	1.06	1.06
Energy Source	0.54	4.60	1.98	0.03	0.37	0.37
Mobile	14.94	93.23	165.57	0.79	62.55	17.01
<b>Total Maximum Daily Emissions</b>	<b>50.18</b>	<b>108.15</b>	<b>220.21</b>	<b>0.88</b>	<b>63.98</b>	<b>18.44</b>
<b>SCAQMD Regional Threshold</b>	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>YES</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	34.70	10.31	52.66	0.06	1.06	1.06
Energy Source	0.54	4.60	1.98	0.03	0.37	0.37
Mobile	12.48	92.52	143.78	0.73	62.55	17.02
<b>Total Maximum Daily Emissions</b>	<b>47.73</b>	<b>107.44</b>	<b>198.42</b>	<b>0.82</b>	<b>63.98</b>	<b>18.44</b>
<b>SCAQMD Regional Threshold</b>	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

**3.5.5 POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY**

Based on the assumed buildout and phasing of the proposed Project, there is potential for overlap between construction and operational activity. As a conservative measure, the total unmitigated and mitigated emissions of the overlap of construction and operational activities are shown in Tables 3-7 and 3-8, respectively. As such, the potential emissions from overlapping construction and operational activity is provided for informational purposes.

**TABLE 3-7: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY  
(UNMITIGATED, 1 OF 2)**

Summer Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Peak Emissions	30.50	128.06	89.09	0.34	25.70	8.9
Operational Total Emissions	50.18	108.15	220.21	0.88	63.98	18.44
<b>Total Maximum Daily Emissions</b>	<b>80.68</b>	<b>236.21</b>	<b>309.3</b>	<b>1.22</b>	<b>89.68</b>	<b>27.34</b>

**TABLE 3-7: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY  
(UNMITIGATED, 2 OF 2)**

Winter Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Peak Emissions	30.50	128.06	89.09	0.34	25.70	8.9
Operational Total Emissions	47.73	107.44	198.42	0.82	63.98	18.44
<b>Total Maximum Daily Emissions</b>	<b>78.23</b>	<b>235.50</b>	<b>287.51</b>	<b>1.16</b>	<b>89.68</b>	<b>27.34</b>

**TABLE 3-8: POTENTIAL OVERLAP OF CONSTRUCTION AND OPERATIONAL ACTIVITY (MITIGATED)**

Summer Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Peak Emissions	30.29	91.79	89.87	0.34	25.64	7.54
Operational Total Emissions	50.18	108.15	220.21	0.88	63.98	18.44
<b>Total Maximum Daily Emissions</b>	<b>80.47</b>	<b>199.94</b>	<b>310.08</b>	<b>1.22</b>	<b>89.62</b>	<b>25.98</b>
Winter Scenario- Maximum Daily Emissions	Emissions (pounds per day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Peak Emissions	30.29	91.79	89.87	0.34	25.64	7.54
Operational Total Emissions	47.73	107.44	198.42	0.82	63.98	18.44
<b>Total Maximum Daily Emissions</b>	<b>78.02</b>	<b>199.23</b>	<b>288.29</b>	<b>1.16</b>	<b>89.62</b>	<b>25.98</b>

### 3.6 LOCALIZED SIGNIFIANCE - 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) (19). 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 PM<sub>10</sub> and PM<sub>2.5</sub>; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board’s Environmental Justice Initiative I-4. 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) (23).

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

For this Project, the appropriate Source Receptor Area (SRA) for the LST is the Hemet/San Jacinto Valley monitoring station (SRA 28). LSTs apply to carbon monoxide (CO), 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>). The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

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

- The CalEEMod model is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (21) 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 SCAQMD recommends that Projects exceeding the screening look-up tables undergo dispersion modeling to determine actual impacts). The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.

#### **EMISSIONS CONSIDERED**

SCAQMD's Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs (24)." 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 3-9 is used to determine the maximum daily disturbed-acreage for use in determining the applicability of the SCAQMD's LST look-up tables. Based on Table 3-9, the proposed Project could actively disturb approximately 6.5 acres per day during the grading for Phase 1 and 2 of construction. As such, the dispersion modeling is used to determine emissions for LSTs.

**TABLE 3-9 : MAXIMUM DAILY DISTURBED-ACREAGE**

Construction Activity	Equipment Type	Equipment Quantity	Acres graded per 8 hour day	Operating Hours per Day	Acres graded per day
Phase 1					
Grading (Rough)	Crawler Tractors	0	0.5	8	0
	Graders	2	0.5	8	1
	Rubber Tired Dozers	3	0.5	8	1.5
	Scrapers	4	1	8	4
Total acres disturbed per day during Grading (Rough)					6.5
Construction Activity	Equipment Type	Equipment Quantity	Acres graded per 8 hour day	Operating Hours per Day	Acres graded per day
Phase 1					
Grading (Fine)	Crawler Tractors	0	0.5	8	0
	Graders	2	0.5	8	1
	Rubber Tired Dozers	3	0.5	8	1.5
	Scrapers	4	1	8	4
Total acres disturbed per day during Grading (Fine)					6.5

**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.






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 8 sensitive receptor locations, as shown on Exhibit 3-A, were identified. Sensitive receptors in the vicinity of the Project site include the single-family residential dwellings located at receptor locations R1 to R8. The closest sensitive receptor is represented by location R6 at a distance of approximately 55 feet/16.76 meters south of the Project site.

- R1: Located approximately 3,542 feet northwest of the Project site, R1 represents the existing residential homes north of Stetson Avenue.
- R2: Location R2 represents existing single-family residential homes located approximately 1,968 feet north of the Project site on Stetson Avenue.
- R3: Location R3 represents the existing single-family residential home located roughly 2,126 feet north of the Project Site on Stetson Avenue.

Exhibit 3-A: Sensitive Receptor



**LEGEND:**

-  Receiver Locations
-  Project Site Boundaries
-  Existing Barrier
-  Distance from receiver to Project site boundary (in feet)
-  Existing Barrier Height (in feet)

- R4: Location R4 represents the single-family residential homes located approximately 292 feet east of the Project site on Camino Sueno.
- R5: Location R5 represents existing single-family residential homes situated approximately 81 feet east of the Project site boundary on Camino Sueno.
- R6: At the time of this analysis, receptor location R6 represents an existing residential home and agricultural land use at a distance of approximately 55 feet south of the Project site. However, this location may represent a vacant structure which is not considered to be a sensitive land use.
- R7: At a distance of 413 feet from the Project site boundary, R7 represents single-family residential homes located west of the Project site on California Avenue.
- R8: Location R8 represents the residential home located approximately 1,447 feet west of the Project site across California Avenue.

As previously stated, the nearest sensitive receptor is located roughly 55 feet/16.76 meters south of the Project site boundary. The *Methodology* explicitly states that “*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (25).*” Consistent with the SCAQMD’s Final LST Methodology, a 25-meter receptor distance is utilized in this analysis and provide for a conservative i.e. “health protective” standard of care.

**DISPERSION MODELING**

SCREEN3 (26), is a U.S. EPA approved air quality model that contains algorithms associated with the USEPA’s *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources* (27). SCREEN3 was used to calculate localized pollutant concentrations for construction and operational activity. SCREEN3 uses dispersion screening techniques to estimate impacts of point, area, and volume stationary sources. It should be noted that the SCREEN3 model was utilized in lieu of the more robust AERMOD (28) and Industrial Source Complex (ISC) (29) model in order to account for worst-case conditions, and since precise construction phasing information is not available at this time.

For purposes of this analysis, receptors are conservatively assumed to be located at 55 feet/16.8 meters for emissions of CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. For emissions of NO<sub>2</sub>, discrete receptors were placed at 20, 50, 70, 100, 200, 500, 1000, 2000, 3000, 4000, and 5000 meters from the fence-line of the Project site to account for the change in NO<sub>x</sub> to NO<sub>2</sub> conversion as a function of distance.

It should be noted that for PM<sub>10</sub> / PM<sub>2.5</sub>, a discrete receptor was placed at the facility fence-line and the SCAQMD—approved downwind distance equation ( $C_x = 0.9403 C_0 e^{-0.0462 X}$ ) was utilized.

- C<sub>x</sub> is the predicted PM<sub>10</sub> concentration at X meters from the fence line.
- C<sub>0</sub> is the PM<sub>10</sub> concentration at the fence line as estimated by SCREEN3.
- e is the natural logarithm.
- X is the distance in meters from the fence line to the nearest sensitive receptor. (For purposes of this analysis, it is estimated that the nearest sensitive receptor is conservatively located ~82 feet/25 meters from the Project boundary).



For Phase 1 grading, an area source encompassing 5.5 acres was modeled, and for Phase 2 grading, an area source encompassing 3 acres was modeled. The urban option of the model was selected, and receptor height was conservatively set at 2.0 meters (consistent with the document Final Localized Significance Threshold Methodology, SCAQMD, June 2003). For PM<sub>10</sub> and PM<sub>2.5</sub> a source release height of 1.0 meters was utilized consistent with SCAQMD methodology. Additionally, for emissions of NO<sub>x</sub> and CO released during construction activity, a source release height of 5.0 meters was utilized.

An emissions rate of 1 gram per second was utilized for emissions of CO, PM<sub>10</sub>, and PM<sub>2.5</sub> and the output in micrograms per cubic meter (µg/m<sup>3</sup>) was then multiplied by the emissions rate determined from the CalEEMod model outputs (and averaged over the appropriate time period and disturbance area). For emissions of NO<sub>x</sub>, the actual emissions rate (in grams/second/m<sup>2</sup>) was programmed into the model. A summary of calculations from both the SCREEN3 model output and calculations for the actual concentration for each pollutant are available for review in Appendix 3.3.

**LOCALIZED THRESHOLDS**

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 (30).

Applicable localized thresholds are as follows:

- California State 1-hour CO standard of 20.0 ppm;
- California State 8-hour CO standard of 9.0 ppm;
- California State 1-hour NO<sub>2</sub> standard of 0.18 ppm;
- SCAQMD 24-hour construction PM<sub>10</sub> LST of 10.4 µg/m<sup>3</sup>;
- SCAQMD 24-hour construction PM<sub>2.5</sub> LST of 10.4 µg/m<sup>3</sup>.

**Impacts without Mitigation**

Without mitigation measures, emissions during roughing grading and fine grading activity will slightly exceed the SCAQMD’s localized significance thresholds for emissions of PM<sub>10</sub> only. Table 3-10 and 3-11 identifies the unmitigated localized impacts at the nearest receptor location in the vicinity of the Project.

**TABLE 3-10: LST SUMMARY (ROUGH GRADING WITHOUT MITIGATION)**

Grading-Mass Excavation	CO		NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.48	0.35	0.02	13.72	7.63
Background Concentration <sup>A</sup>	2.0	1.4	0.05		
<b>Total Concentration</b>	<b>2.48</b>	<b>1.75</b>	<b>0.07</b>	<b>13.72</b>	<b>7.63</b>
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>

<sup>A</sup> Highest concentration from the last three years of available data  
 Note: PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are expressed in µg/m<sup>3</sup>. All others are expressed in ppm

**TABLE 3-11: LST SUMMARY (FINE GRADING WITHOUT MITIGATION)**

Grading-Rough-Fine	CO		NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.38	0.28	0.02	12.84	6.83
Background Concentration <sup>A</sup>	2.0	1.4	0.05		
<b>Total Concentration</b>	<b>2.38</b>	<b>1.68</b>	<b>0.07</b>	<b>12.84</b>	<b>6.83</b>
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>

<sup>A</sup> Highest concentration from the last three years of available data  
 Note: PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are expressed in µg/m<sup>3</sup>. All others are expressed in ppm

**Impacts with Mitigation**

After the implementation of BACM AQ-1 and MM AQ-1, emissions during construction activity will not exceed the SCAQMD’s localized significance threshold for any of the applicable emissions. Table 3-12 and 3-13 identifies the mitigated localized impacts at the nearest receptor location in the vicinity of the Project after implementation of BACM AQ-1 and MM AQ-1.

**TABLE 3-12: LST SUMMARY (ROUGH GRADING WITH MITIGATION)**

Grading-Mass Excavation	CO		NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.33	0.24	0.01	5.30	3.01
Background Concentration <sup>A</sup>	2.0	1.4	0.05		
<b>Total Concentration</b>	<b>2.33</b>	<b>1.64</b>	<b>0.06</b>	<b>5.30</b>	<b>3.01</b>
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

<sup>A</sup> Highest concentration from the last three years of available data  
 Note: PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are expressed in µg/m<sup>3</sup>. All others are expressed in ppm

**TABLE 3-13: LST SUMMARY (FINE GRADING WITH MITIGATION)**

Grading-Rough/Fine	CO		NO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours (Construction)	
Peak Day Localized Emissions	0.33	0.24	0.01	5.22	2.93
Background Concentration <sup>A</sup>	2.0	1.4	0.05		
<b>Total Concentration</b>	<b>2.33</b>	<b>1.64</b>	<b>0.06</b>	<b>5.22</b>	<b>2.93</b>
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
<b>Threshold Exceeded?</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

<sup>A</sup> Highest concentration from the last three years of available data  
 Note: PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are expressed in µg/m<sup>3</sup>. All others are expressed in ppm

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

The proposed project involves the construction and operation of 588 single family residential dwelling units and 100,000 square feet of commercial uses. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., transfer facilities and warehouse buildings). The proposed project does not include such uses, and thus, due to the lack of significant stationary source emissions, no long-term localized significance threshold analysis is needed.

### 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 (31).

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 3-14.

**TABLE 3-14: CO MODEL RESULTS**

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

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations  
 Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 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 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (31). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO “hot spot” at any study area intersections.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (32).

Traffic volumes generating the CO concentrations for the “hot spot” analysis, shown on Table 3-15. 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 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).<sup>4</sup> At buildout of the Project, the highest average daily trips on a segment of road would be 86,900 daily trips on east of Warren Road and Florida Avenue (SR-74) which is lower than the highest daily traffic volumes generated at the busiest intersection in the CO “hot spot” analysis (33).

**TABLE 3-15: TRAFFIC VOLUMES**

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

Source: 2003 AQMP

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

<sup>4</sup> Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

on representative BAAQMD CO threshold considerations, as shown on Table 3-16. 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 3-16: PEAK TRAFFIC VOLUMES**

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
Vista Pl./Winchester Rd. (SR-79)/ Florida Av. (SR-74)	612/1,532	798/187	2,232/2,372	1,712/2,338	5,353/6,429
Patterson Av./Domenigoni Pkwy.	870/1,430	558/441	2,319/1,631	1,395/2,645	5,142/6,147
SR-79 NB Ramps/ Florida Av. (SR-74)	670/641	0/0	2,542/2,280	1,738/3,059	4,950/5,980
Warren Rd./Florida Av.	1,053/2,270	1,770/965	2,461/1,838	2,167/2,327	7,452/7,400

Source: Rancho Diamante (Tentative Tract Map No. 36841) Traffic Impact Analysis (Urban Crossroads, Inc.) 2018

### 3.9 AIR QUALITY MANAGEMENT PLANNING

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

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

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (34). 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 (35). The Project’s consistency with the AQMP will be determined using the 2016 AQMP as 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) (36). These indicators are discussed below:

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

### **Construction Impacts**

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if localized significance thresholds (LSTs) or regional significance thresholds were exceeded. As evaluated as part of the Project LST analysis (previously presented), the Project's localized and regional construction-source emissions would not exceed applicable significance thresholds (after implementation of applicable mitigation measures).

### **Operational Impacts**

The Project regional analysis demonstrates that Project operational-source emissions would exceed applicable thresholds and would therefore have the potential to result in or cause violations of the CAAQS and NAAQS.

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

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

### **Overview**

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City of Hemet 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 Hemet designates the Project site as “Low Density Residential” (LDR) (2.1-5.0 du/ac) and Industrial. According to the City General Plan 2030, LDR land uses allow for traditional residential subdivisions, planned residential developments, mobile home subdivisions and parks, and low-density senior housing; typical lot size is in the 5,000-6,000 square feet range (37). Industrial land uses allow manufacturing, business office, assembly, fabrication, construction, transportation, logistics, and auto repair uses; industrial uses have a maximum intensity range of 0.45 floor area ratio (FAR).

The Project site is located within the geographical limits of the Page Ranch Specific Plan (PRSP). The PRSP applies a “Planned Community Development 79-93” (PCD 79-93) zoning designation to the Project site. The PCD 79-93 zoning designation allows for a variety of residential developments and associated compatible uses. Specifically, the PCD 79-93 designates the Project site as having a “Residential” (R-1) zoning designation, with a gross density of 2.5 du/ac (38).

The Project proposes to construct 588 single family detached residential units and 100,000 sf commercial retail use. The Project has a proposed general plan land use designation of LDR and a proposed zoning of PCD 79-93. It should be noted that the proposed development would not exceed regional or local thresholds and would therefore be considered to have a less than significant impact. As such, the Project is consistent with the City’s General Plan land use and zoning designation. Thus, development proposed by the Project is consistent with the growth projections in the General Plan and is therefore considered to be consistent with the AQMP.

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

### **AQMP Consistency Conclusion**

The Project would not result in or cause NAAQS or CAAQS violations. The Project’s proposed land use designation for the subject site would not materially affect the development intensities as reflected in the adopted General Plan. The Project is therefore considered to be consistent with the AQMP.

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

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

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during construction (after mitigation). Therefore sensitive receptors would not be subject to a significant air quality impact during Project construction.

Results of the LST analysis indicate that the Project will not exceed the SCAQMD localized significance thresholds during operational activity. The proposed Project would not result in a

CO “hotspot” as a result of Project related traffic during ongoing operations, nor would the Project result in a significant adverse health impact as discussed in Section 3.8. Thus a less than significant impact to sensitive receptors during operational activity is expected.

### 3.11 ODORS

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

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

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

### 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* (39). 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. For this Project, a less than significant project-specific and thus less than cumulatively considerable impact would occur since the Project’s emissions after implementation of BACMs and MMs do not exceed the SCAQMD thresholds for construction and on-going operational activity.

**CRITERION 1; REGIONAL EMISSIONS ANALYSIS**

Construction Impacts

The Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project construction-source air pollutant emissions will not result in exceedances of regional thresholds. Therefore, Project construction-source emissions would be considered less than significant on a project-specific and cumulative basis.

Operational Impacts

Project operational-source emissions will not exceed applicable SCAQMD regional thresholds for . Therefore, Project operational-source emissions would be considered less than significant on a project-specific and cumulative basis.

**CRITERION 2; LOCAL EMISSIONS ANALYSIS UTILIZING 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. Nevertheless, the potential cumulative impacts from the Project and other projects are discussed below. A cumulative project list was developed for this analysis and is shown in Table 3-17.

Related projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. With regard to determining the significance of the contribution from the Project, the SCAQMD recommends that any given project’s potential contribution to cumulative impacts should be assessed using the same significance criteria as for project-specific impacts. 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 commutatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project does not exceed the applicable SCAQMD regional threshold for construction and on-going operational activity. As such, the Project will not result in a cumulatively significant impact.

**TABLE 3-17: CUMULATIVE IMPACTS**

#	Name	Land Use	Quantity	Units <sup>1</sup>
<b>City of Hemet</b>				
H1	Florida Promenade (SP 06-04)	Commercial	200.00 (100.00 Built)	TSF
H2	Florida Promenade Residential	Senior Residential (attached)	440	DU
		Single Family Residential	145	DU
H3	Sanderson Square (SP 05-03)	Commercial	243.00	TSF
		Office/Industrial	186.70	TSF
H4	Ramona Creek Specific Plan	Single Family Residential	1077	DU
		Mixed-Use	145.645	TSF
		Shopping Center	535.788	TSF
		Open Space Corridor	23.8	AC
		Recreation Spine	12.2	AC
H5	TTM 35990 Corwin Ranch	Single Family Residential	12	DU
H6	Hemet Auto Mall Retail Expansion (CUP 07-21)	Commercial	108	TSF
H7	Tres Cerritos West (VTTM 31513)	Single Family Residential	178	DU
H8	Montero (VTTM 31146)	Single Family Residential	86 (70 Built)	DU
		Neighborhood Park	0.76	AC
H9	Peppertree Ranch (SP 01-3 and VTTM 29843)	Senior Residential (detached)	465 (16 Built)	DU

		Parks/Open Space	40.20	AC
H10	The Boardwalk (CUP 06-4)	Commercial	94.00 (20.00 Built)	TSF
H11	TTM 29581 (Covenant)	Single Family Residential	71	DU
H12	Zanderson Plaza (CUP 16-006 + TPM 37196)	Commercial	68	TSF
H13	Stoney Mountain Ranch (TTM 29129)	Single Family Residential	395 (303 Built)	DU
H14	TTM 33707 (Devonshire Partners) CUP 03-16A	Single Family Residential	98 (25 Built)	DU
H15	TTM 24147-1 Hideaway	Single Family Residential	71	DU
H16	Tres Cerritos East (SPA 06-1)	Single Family Residential	775	DU
H17	Page Ranch Elementary School	Elementary School	750	STU
H18	Freedom Middle School	Middle School	1500	STU
H19	TM 31976 Hideaway	Single Family Residential	121	DU
H20	St. Deminia Center (CUP 07-16)	Commercial	33.48	TSF
H21	Stetson Crossing (SP 07-4)	Commercial	189.00	TSF
H22	Nelson (SDR 06-28)	Industrial	16.20	TSF
H23	CUP 17-002 Crossroads	Commercial	1.00	TSF
H24	McSweeney TTM 33824 (Map 05-10)	Single Family Residential	238	DU
H25	McSweeney TTM 33825 (Map 05-11)	Single Family Residential	259	DU
H26	McSweeney TTM 34660	Single Family Residential	396	DU
H27	McSweeney TTM 34661	Single Family Residential	427	DU
H28	McSweeney TTM 34662	Single Family Residential	11	DU
H29	Santa Fe Pointe SDR 15-001	Multi-Family Residential	241	DU
H30	Acacia Gardens Expansion (CUP 06-5)	Multi-Family Residential	50	DU
H31	Cawston Plaza (CUP 07-26)	Commercial	21.00	TSF
H32	Scripps West (CUP 08-14)	Commercial	5.30	TSF
H33	Hemet Medical (CUP 07-24)(TPM 35701)	Medical Office	126.00 (50.00 Built)	TSF
H34	Hemet 63 (ZC 05-04)	Commercial	260.00	TSF
H35	JAKS LLC (ZC 04-13)	Commercial	170.00	TSF
H36	Les Schwab Tire Store	Automotive Retail	11.97	TSF
H37	Taco Bell (CIP 16-004)	Fast-Food Restaurant	2.09	TSF
H38	TTM 33858	Single Family Residential	37	DU
H39	TTM 34712	Multi-Family Residential	40	DU
H40	7 Days Market (CUP 13-005)	Service Station	6	Pumps
H41	Downtown Hemet Specific Plan	Various	Various	
H42	TM 25225 (Copenhagen)	Multi-Family Residential	40	DU
H43	TTM 36929	Single Family Residential	21	DU
H44	TTM 36924	Single Family Residential	58	DU
H45	TTM 37087	Single Family Residential	20	DU
H46	Circle K (CUP 16-005)	Gas Station w/ Convenience Store & Car Wash	20	Pumps
H47	Clinca de Salud (SDR 16-003)	Medical Office	13.00	TSF
H48	Al For Show (CUP 16-002)	Retail	3.02	TSF
H49	Gas Mart Remodel	Gas Station w/ Convenience Store	6	Pumps

H50	KPC Towne Center (SDR 15-004)	Shopping Center	124.88	TSF
<b>City of San Jacinto</b>				
SJ1	TR22665 (50% Occupied)	Single Family Residential	75	DU
SJ2	TR30034 (SP 1-01)	Single Family Residential	50	DU
	TR30035 (SP 1-01)	Single Family Residential	74	DU
	TR30036 (SP 1-01)	Single Family Residential	104	DU
	TR30084 (SP 1-01)- Under Construction	Single Family Residential	111	DU
	TR30090 (SP 1-01)	Single Family Residential	5	DU
SJ3	TR30481	Single Family Residential	30	DU
SJ4	TR30597	Single Family Residential	116	DU
SJ5	TR30659	Single Family Residential	64	DU
SJ6	TR30878	Single Family Residential	18	DU
SJ7	TR30944	Single Family Residential	14	DU
SJ8	TR31037	Single Family Residential	263	DU
SJ9	TR31154	Single Family Residential	88	DU
SJ10	TR31294	Single Family Residential	37	DU
SJ11	VTR31384	Single Family Residential	91	DU
SJ12	TR33546	Single Family Residential	5	DU
SJ13	TR31886 - Under Construction	Single Family Residential	321	DU
SJ14	TR30598 (SP 1-03)	Single Family Residential	580	DU
SJ15	TR31929	Single Family Residential	78	DU
SJ16	TR32247	Single Family Residential	150	DU
SJ17	TR32955 (SP1-02)	Single Family Residential	613	DU
SJ18	TR32555	Single Family Residential	12	DU
SJ19	TR33420A1	Single Family Residential	108	DU
SJ20	Future Schools (Middle / Elementary)	School	1200	STU
SJ21	PM35626	Shopping Center	195.74	TSF
		Apartments	150	DU
SJ22	PM33196 San Jacinto Retail Center	Drive-In Bank	4.70	TSF
		Fast-Food w/ Drive Thru	3.45	TSF
SJ23	TR32352	Single Family Residential	153	DU
<b>County of Riverside</b>				
RC1	K-1 Speed Outdoor Kart Track	Outdoor Kart Track	86.88	TSF
RC2	CUP03479	Gas Station	8	VFP
		Fast-Food w/ Drive Thru	1.50	TSF
RC3	PM33564	SFDR	4	DU
RC4	Emerald Acres Specific Plan SP00381	Single Family Residential	432	DU
RC5	TR35017	SFDR	44	DU
RC6	PP22849 (Jack-In-The-Box)	Fast-Food w/ Drive Thru	2.78	TSF
RC7	TR34129	SFDR	197	DU
RC8	TR31537	SFDR	726	DU
RC9	TR32237	SFDR	98	DU
RC10	TR32248	SFDR	86	DU
RC11	TR31076	SFDR	16	DU
RC12	TR34130	SFDR	384	DU
RC13	TR34677	SFDR	422	DU

	TR31100	SFDR	243	DU
	TR32391	SFDR	127	DU
	TR33448	SFDR	31	DU
	TR31101	SFDR	160	DU
	TR31099	SFDR	207	DU
	TR32282	SFDR	625	DU
RC14	TR36478	Condos	150	DU
	TR36480	Condos	138	DU
	PP25219	Apartments	180	DU
RC15	CUP03579	Restaurant	5.61	TSF
		Retail	8.76	TSF
		Gas Station w/ Convenience Store	3.03	TSF
RC16	TR36504	SFDR	562	DU
RC17	CUP01190	Mobile Home Park	60	SPACE S
RC18	TR36711	Condos	102	DU
	TR36365	SFDR	224	DU
	TR33450	SFDR	57	DU
	TR33225	SFDR	14	DU
	TR31857	SFDR	140	DU
	TR31858	SFDR	185	DU
	TR36430	SFDR	340	DU
		Elementary School	600	STU
RC19	TR26973	Single Family Residential	43	DU
RC20	Domenigoni – Barton Properties (SP 310)	SFDR	4186	DU
		Golf Course	18	Holes
		School	12.00	STU
RC21	PP14248	Automotive Retail	8.20	TSF
RC22	TR23551	Single Family Residential	38	DU
RC23	TR30351	Single Family Residential	273	DU
RC24	PP25623	Animal Hospital	--	
RC25	RVP900110 (Revision to PP11686)	Fast-Food w/o Drive Thru	2.48	TSF
RC26	PP15735	Fast-Food w/o Drive Thru	1.20	TSF
RC27	TR31538	Single Family Residential	257	DU
RC28	TR37079	Single Family Residential	53.46	AC
		Commercial		
RC29	BSA Properties (SP 322)	Commercial	202	AC
		Single Family Residential	421	DU
RC30	PP13023	Commercial	7.36	TSF
RC31	PM29141	Single Family Residential	--	
RC32	The Crossroads in Winchester (SP 288 Amendment 2)	Single Family Residential	771	DU
		Condos/Townhomes	154	DU
		Commercial	32.5	AC
<sup>1</sup> DU = Dwelling Units; STU = Students; TSF = Thousand Square Feet; BEDS = Occupied Beds				

## 4 FINDINGS & CONCLUSIONS

### CONSTRUCTION-SOURCE EMISSIONS

#### *REGIONAL IMPACTS*

For regional emissions, the Project has the potential to exceed the numerical thresholds of significance established by the South Coast Air Quality Management District (SCAQMD) for emissions of Oxides of Nitrogen (NO<sub>x</sub>). Mitigation measure MM AQ-1 is recommended to reduce the impacts to less than significant levels. After implementation of the applicable MM, construction activity emissions will not exceed the numerical thresholds established by the SCAQMD for any criteria pollutants. Thus, a less than significant impact will occur.

#### *LOCALIZED IMPACTS*

Prior to implementation of MMs, emissions during construction activity have the potential to exceed the SCAQMD's localized significance threshold for particulate matter ≤ 10 microns (PM<sub>10</sub>). After implementation of applicable MMs, emissions during construction activity will not exceed any of the SCAQMD's localized significance thresholds. Therefore, a less than significant impact would occur.

Project construction-source emissions would not conflict with the applicable Air Quality Management District (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 has the potential to exceed the threshold of significance for emissions of NO<sub>x</sub>. It is important to note that the majority of NO<sub>x</sub> emissions are derived from vehicle usage. Since the Project does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NO<sub>x</sub> emissions to levels that are less-than-significant, thus these emissions are considered significant and unavoidable.

#### *LOCALIZED IMPACTS*

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

ongoing operations, nor would the Project result in a significant adverse health impact as discussed in Section 3.8, thus a less than significant impact to sensitive receptors during operational activity is expected.

*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 residential refuse. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (40) . Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

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## 6 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Rancho Diamante (Tentative Tract Map No. 36841) Project. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 660-1994 ext. 217.

Haseeb Qureshi  
Senior Associate  
URBAN CROSSROADS, INC.  
260 E. Baker Street, Suite 200  
Costa Mesa, CA 92626  
(949) 336-5987  
[hqureshi@urbanxroads.com](mailto:hqureshi@urbanxroads.com)

### EDUCATION

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

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

### PROFESSIONAL AFFILIATIONS

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

### PROFESSIONAL CERTIFICATIONS

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

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**APPENDIX 2.1:**

**STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS**

**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 <sub>3</sub> )	(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
PM <sub>2.5</sub> <sup>e</sup>	(2006) <b>24-Hour</b> (35 µg/m <sup>3</sup> )	Nonattainment (“serious”)	12/31/2019
	(2012) <b>Annual</b> (12.0 µg/m <sup>3</sup> )	Nonattainment (“moderate”)	12/31/2021
	(1997) <b>Annual</b> (15.0 µg/m <sup>3</sup> )	Attainment (final determination pending)	4/5/2015 (attained 2013)
PM <sub>10</sub> <sup>f</sup>	(1987) <b>24-hour</b> (150 µg/m <sup>3</sup> )	Attainment (Maintenance)	7/26/2013 (attained)
Lead (Pb) <sup>g</sup>	(2008) <b>3-Months Rolling</b> (0.15 µg/m <sup>3</sup> )	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) (1971) <b>Annual</b> (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)

- a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
- b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for an attainment demonstration
- c) The 1979 1-hour ozone NAAQS (0.12 ppm) was revoked, effective 6/15/05 ; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard; original attainment date was 11/15/2010; the revised attainment date is 2/6/23
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm, effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour ozone NAAQS (0.08 ppm) was revoked in the 2008 ozone NAAQS implementation rule, effective 4/6/15; there are continuing obligations under the revoked 1997 and revised 2008 ozone NAAQS until they are attained
- e) The attainment deadline for the 2006 24-hour PM<sub>2.5</sub> NAAQS was 12/31/15 for the former “moderate” classification; U.S.EPA approved reclassification to “serious,” effective 2/12/16 with an attainment deadline of 12/31/2019; the 2012 (proposal year) annual PM<sub>2.5</sub> NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m<sup>3</sup>; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 U.S. EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m<sup>3</sup>) and 24-hour PM<sub>2.5</sub> (65 µg/m<sup>3</sup>) NAAQS, effective August 24, 2016
- f) The annual PM<sub>10</sub> NAAQS was revoked, effective 12/18/06; the 24-hour PM<sub>10</sub> NAAQS deadline was 12/31/2006; the Basin’s Attainment Re-designation Request and PM<sub>10</sub> 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) (1971) <b>Annual</b> (0.03 ppm)	Unclassifiable/Attainment	Unclassifiable/ Attainment

- 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/degis/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



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## **APPENDIX 3.1:**

### **CALEEMOD CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 1 (Construction - Unmitigated)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Average Lot Area: 6,434 SF; Average home size is assumed to be 35% maximum coverage of lot area.

Construction Phase - Construction Schedule adjusted to meet operational year.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

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

Off-road Equipment -

Grading -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Woodstoves - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	220.00	440.00
tblConstructionPhase	NumDays	3,100.00	1,000.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	PhaseEndDate	3/3/2034	9/25/2024
tblConstructionPhase	PhaseEndDate	6/25/2032	8/18/2023
tblConstructionPhase	PhaseEndDate	8/7/2020	10/18/2019

## Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblConstructionPhase	PhaseEndDate	4/29/2033	6/21/2024
tblConstructionPhase	PhaseStartDate	4/30/2033	1/19/2023
tblConstructionPhase	PhaseStartDate	8/8/2020	10/19/2019
tblConstructionPhase	PhaseStartDate	6/26/2032	8/19/2023
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	951.67	0.00
tblEnergyUse	T24NG	24,566.15	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	499.80	0.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	MaterialImported	0.00	52,300.00
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	689.62	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00

## Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	38,310,567.07	0.00
tblWater	OutdoorWaterUseRate	24,152,314.02	0.00
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	12.9633	128.0620	89.0911	0.3378	24.9477	4.8470	29.7947	10.9247	4.4615	15.3861	0.0000	34,421.06 30	34,421.06 30	4.0068	0.0000	34,485.41 83
2020	11.7610	85.7921	81.8324	0.3316	21.2088	1.6491	22.8580	5.7104	1.5527	7.2631	0.0000	33,763.19 70	33,763.19 70	2.4187	0.0000	33,823.66 37
2021	10.7411	77.1428	75.7295	0.3252	21.2087	1.2347	22.4434	5.7103	1.1592	6.8695	0.0000	33,126.18 58	33,126.18 58	2.3024	0.0000	33,183.74 52
2022	9.9872	71.5962	71.0534	0.3184	21.2085	1.0545	22.2631	5.7103	0.9904	6.7006	0.0000	32,448.32 20	32,448.32 20	2.1970	0.0000	32,503.24 69
2023	30.5012	59.5583	76.3463	0.3407	24.6958	0.9999	25.6957	6.6351	0.9437	7.5787	0.0000	34,643.19 64	34,643.19 64	1.9510	0.0000	34,691.97 03
2024	23.2213	11.8209	24.7876	0.0548	3.6551	0.5700	4.2251	0.9694	0.5309	1.5003	0.0000	5,374.323 1	5,374.323 1	0.7883	0.0000	5,394.031 0
<b>Maximum</b>	<b>30.5012</b>	<b>128.0620</b>	<b>89.0911</b>	<b>0.3407</b>	<b>24.9477</b>	<b>4.8470</b>	<b>29.7947</b>	<b>10.9247</b>	<b>4.4615</b>	<b>15.3861</b>	<b>0.0000</b>	<b>34,643.19 64</b>	<b>34,643.19 64</b>	<b>4.0068</b>	<b>0.0000</b>	<b>34,691.97 03</b>





Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</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	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	10/18/2019	5	100	
2	Building Construction	Building Construction	10/19/2019	8/18/2023	5	1000	
3	Architectural Coating	Architectural Coating	1/19/2023	9/25/2024	5	440	
4	Paving	Paving	8/19/2023	6/21/2024	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 500

Acres of Paving: 73.72

Residential Indoor: 2,681,337; Residential Outdoor: 893,779; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 192,675 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	6,538.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,560.00	589.00	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	312.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.4350	0.0000	23.4350	10.5133	0.0000	10.5133			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006		11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>23.4350</b>	<b>4.7833</b>	<b>28.2183</b>	<b>10.5133</b>	<b>4.4006</b>	<b>14.9139</b>		<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3862	16.8702	2.3612	0.0491	1.1439	0.0614	1.2053	0.3136	0.0588	0.3724		5,202.654 0	5,202.654 0	0.3629		5,211.727 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1775	0.1154	1.1882	3.3800e-003	0.3689	2.2800e-003	0.3711	0.0978	2.1000e-003	0.0999		336.7707	336.7707	9.1400e-003		336.9991
<b>Total</b>	<b>0.5637</b>	<b>16.9857</b>	<b>3.5494</b>	<b>0.0524</b>	<b>1.5127</b>	<b>0.0637</b>	<b>1.5764</b>	<b>0.4114</b>	<b>0.0609</b>	<b>0.4723</b>		<b>5,539.424 7</b>	<b>5,539.424 7</b>	<b>0.3721</b>		<b>5,548.726 2</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1397	0.0000	9.1397	4.1002	0.0000	4.1002			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006	0.0000	11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>9.1397</b>	<b>4.7833</b>	<b>13.9229</b>	<b>4.1002</b>	<b>4.4006</b>	<b>8.5008</b>	<b>0.0000</b>	<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3862	16.8702	2.3612	0.0491	1.1439	0.0614	1.2053	0.3136	0.0588	0.3724		5,202.654 0	5,202.654 0	0.3629		5,211.727 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1775	0.1154	1.1882	3.3800e- 003	0.3689	2.2800e- 003	0.3711	0.0978	2.1000e- 003	0.0999		336.7707	336.7707	9.1400e- 003		336.9991
<b>Total</b>	<b>0.5637</b>	<b>16.9857</b>	<b>3.5494</b>	<b>0.0524</b>	<b>1.5127</b>	<b>0.0637</b>	<b>1.5764</b>	<b>0.4114</b>	<b>0.0609</b>	<b>0.4723</b>		<b>5,539.424 7</b>	<b>5,539.424 7</b>	<b>0.3721</b>		<b>5,548.726 2</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0593	66.8952	14.6086	0.1492	3.7719	0.5156	4.2875	1.0860	0.4933	1.5793		15,722.6857	15,722.6857	1.4518		15,758.9813
Worker	8.3925	5.4567	56.1686	0.1598	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		15,920.0676	15,920.0676	0.4320		15,930.8671
<b>Total</b>	<b>10.4518</b>	<b>72.3519</b>	<b>70.7772</b>	<b>0.3090</b>	<b>21.2090</b>	<b>0.6233</b>	<b>21.8323</b>	<b>5.7104</b>	<b>0.5924</b>	<b>6.3028</b>		<b>31,642.7533</b>	<b>31,642.7533</b>	<b>1.8838</b>		<b>31,689.8483</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

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

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0593	66.8952	14.6086	0.1492	3.7719	0.5156	4.2875	1.0860	0.4933	1.5793		15,722.6857	15,722.6857	1.4518		15,758.9813
Worker	8.3925	5.4567	56.1686	0.1598	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		15,920.0676	15,920.0676	0.4320		15,930.8671
<b>Total</b>	<b>10.4518</b>	<b>72.3519</b>	<b>70.7772</b>	<b>0.3090</b>	<b>21.2090</b>	<b>0.6233</b>	<b>21.8323</b>	<b>5.7104</b>	<b>0.5924</b>	<b>6.3028</b>		<b>31,642.7533</b>	<b>31,642.7533</b>	<b>1.8838</b>		<b>31,689.8483</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7316	60.2859	12.9816	0.1481	3.7717	0.3488	4.1205	1.0860	0.3337	1.4196		15,611.0187	15,611.0187	1.3538		15,644.8644
Worker	7.7743	4.8569	50.8831	0.1547	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		15,416.4784	15,416.4784	0.3829		15,426.0512
<b>Total</b>	<b>9.5059</b>	<b>65.1427</b>	<b>63.8646</b>	<b>0.3028</b>	<b>21.2088</b>	<b>0.4544</b>	<b>21.6632</b>	<b>5.7104</b>	<b>0.4309</b>	<b>6.1412</b>		<b>31,027.4971</b>	<b>31,027.4971</b>	<b>1.7367</b>		<b>31,070.9156</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7316	60.2859	12.9816	0.1481	3.7717	0.3488	4.1205	1.0860	0.3337	1.4196		15,611.0187	15,611.0187	1.3538		15,644.8644
Worker	7.7743	4.8569	50.8831	0.1547	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		15,416.4784	15,416.4784	0.3829		15,426.0512
<b>Total</b>	<b>9.5059</b>	<b>65.1427</b>	<b>63.8646</b>	<b>0.3028</b>	<b>21.2088</b>	<b>0.4544</b>	<b>21.6632</b>	<b>5.7104</b>	<b>0.4309</b>	<b>6.1412</b>		<b>31,027.4971</b>	<b>31,027.4971</b>	<b>1.7367</b>		<b>31,070.9156</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>		<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4604	54.0362	11.5038	0.1469	3.7716	0.1068	3.8784	1.0859	0.1021	1.1880		15,489.1226	15,489.1226	1.2830		15,521.1963
Worker	7.2580	4.3574	46.5550	0.1495	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		14,901.0194	14,901.0194	0.3443		14,909.6277
<b>Total</b>	<b>8.7184</b>	<b>58.3936</b>	<b>58.0588</b>	<b>0.2964</b>	<b>21.2087</b>	<b>0.2096</b>	<b>21.4183</b>	<b>5.7103</b>	<b>0.1968</b>	<b>5.9071</b>		<b>30,390.1420</b>	<b>30,390.1420</b>	<b>1.6273</b>		<b>30,430.8240</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>	<b>0.0000</b>	<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4604	54.0362	11.5038	0.1469	3.7716	0.1068	3.8784	1.0859	0.1021	1.1880		15,489.1226	15,489.1226	1.2830		15,521.1963
Worker	7.2580	4.3574	46.5550	0.1495	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		14,901.0194	14,901.0194	0.3443		14,909.6277
<b>Total</b>	<b>8.7184</b>	<b>58.3936</b>	<b>58.0588</b>	<b>0.2964</b>	<b>21.2087</b>	<b>0.2096</b>	<b>21.4183</b>	<b>5.7103</b>	<b>0.1968</b>	<b>5.9071</b>		<b>30,390.1420</b>	<b>30,390.1420</b>	<b>1.6273</b>		<b>30,430.8240</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3636	50.9094	10.7386	0.1456	3.7714	0.0900	3.8614	1.0859	0.0860	1.1719		15,353.8834	15,353.8834	1.2163		15,384.2905
Worker	6.8090	3.9198	42.8757	0.1440	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		14,357.2866	14,357.2866	0.3096		14,365.0276
<b>Total</b>	<b>8.1726</b>	<b>54.8292</b>	<b>53.6142</b>	<b>0.2896</b>	<b>21.2085</b>	<b>0.1900</b>	<b>21.3986</b>	<b>5.7103</b>	<b>0.1781</b>	<b>5.8884</b>		<b>29,711.1700</b>	<b>29,711.1700</b>	<b>1.5259</b>		<b>29,749.3181</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3636	50.9094	10.7386	0.1456	3.7714	0.0900	3.8614	1.0859	0.0860	1.1719		15,353.8834	15,353.8834	1.2163		15,384.2905
Worker	6.8090	3.9198	42.8757	0.1440	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		14,357.2866	14,357.2866	0.3096		14,365.0276
<b>Total</b>	<b>8.1726</b>	<b>54.8292</b>	<b>53.6142</b>	<b>0.2896</b>	<b>21.2085</b>	<b>0.1900</b>	<b>21.3986</b>	<b>5.7103</b>	<b>0.1781</b>	<b>5.8884</b>		<b>29,711.1700</b>	<b>29,711.1700</b>	<b>1.5259</b>		<b>29,749.3181</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0418	38.1435	9.2076	0.1417	3.7713	0.0402	3.8115	1.0858	0.0384	1.1242		14,954.8652	14,954.8652	0.9275		14,978.0533
Worker	6.4044	3.5332	39.5115	0.1385	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		13,812.4280	13,812.4280	0.2783		13,819.3857
<b>Total</b>	<b>7.4462</b>	<b>41.6767</b>	<b>48.7191</b>	<b>0.2802</b>	<b>21.2084</b>	<b>0.1379</b>	<b>21.3463</b>	<b>5.7102</b>	<b>0.1283</b>	<b>5.8385</b>		<b>28,767.2932</b>	<b>28,767.2932</b>	<b>1.2058</b>		<b>28,797.4390</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0418	38.1435	9.2076	0.1417	3.7713	0.0402	3.8115	1.0858	0.0384	1.1242		14,954.8652	14,954.8652	0.9275		14,978.0533
Worker	6.4044	3.5332	39.5115	0.1385	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		13,812.4280	13,812.4280	0.2783		13,819.3857
<b>Total</b>	<b>7.4462</b>	<b>41.6767</b>	<b>48.7191</b>	<b>0.2802</b>	<b>21.2084</b>	<b>0.1379</b>	<b>21.3463</b>	<b>5.7102</b>	<b>0.1283</b>	<b>5.8385</b>		<b>28,767.2932</b>	<b>28,767.2932</b>	<b>1.2058</b>		<b>28,797.4390</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2809	0.7066	7.9023	0.0277	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		2,762.4856	2,762.4856	0.0557		2,763.8771
<b>Total</b>	<b>1.2809</b>	<b>0.7066</b>	<b>7.9023</b>	<b>0.0277</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>2,762.4856</b>	<b>2,762.4856</b>	<b>0.0557</b>		<b>2,763.8771</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2809	0.7066	7.9023	0.0277	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		2,762.4856	2,762.4856	0.0557		2,763.8771
<b>Total</b>	<b>1.2809</b>	<b>0.7066</b>	<b>7.9023</b>	<b>0.0277</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>2,762.4856</b>	<b>2,762.4856</b>	<b>0.0557</b>		<b>2,763.8771</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2108	0.6405	7.3929	0.0267	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,663.4609	2,663.4609	0.0508		2,664.7303
<b>Total</b>	<b>1.2108</b>	<b>0.6405</b>	<b>7.3929</b>	<b>0.0267</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,663.4609</b>	<b>2,663.4609</b>	<b>0.0508</b>		<b>2,664.7303</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2108	0.6405	7.3929	0.0267	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,663.4609	2,663.4609	0.0508		2,664.7303
<b>Total</b>	<b>1.2108</b>	<b>0.6405</b>	<b>7.3929</b>	<b>0.0267</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,663.4609</b>	<b>2,663.4609</b>	<b>0.0508</b>		<b>2,664.7303</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		132.8118	132.8118	2.6800e-003		132.8787
<b>Total</b>	<b>0.0616</b>	<b>0.0340</b>	<b>0.3799</b>	<b>1.3300e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>132.8118</b>	<b>132.8118</b>	<b>2.6800e-003</b>		<b>132.8787</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		132.8118	132.8118	2.6800e-003		132.8787
<b>Total</b>	<b>0.0616</b>	<b>0.0340</b>	<b>0.3799</b>	<b>1.3300e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>132.8118</b>	<b>132.8118</b>	<b>2.6800e-003</b>		<b>132.8787</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
<b>Total</b>	<b>0.0582</b>	<b>0.0308</b>	<b>0.3554</b>	<b>1.2800e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>128.0510</b>	<b>128.0510</b>	<b>2.4400e-003</b>		<b>128.1120</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
<b>Total</b>	<b>0.0582</b>	<b>0.0308</b>	<b>0.3554</b>	<b>1.2800e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>128.0510</b>	<b>128.0510</b>	<b>2.4400e-003</b>		<b>128.1120</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Unmitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

**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**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**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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Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 1 (Construction - Unmitigated)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	702.44	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Average Lot Area: 6,434 SF; Average home size is assumed to be 35% maximum coverage of lot area.

Construction Phase - Construction Schedule adjusted to meet operational year.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

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

Off-road Equipment -

Grading -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Woodstoves - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	220.00	440.00
tblConstructionPhase	NumDays	3,100.00	1,000.00
tblConstructionPhase	NumDays	310.00	100.00
tblConstructionPhase	PhaseEndDate	3/3/2034	9/25/2024
tblConstructionPhase	PhaseEndDate	6/25/2032	8/18/2023
tblConstructionPhase	PhaseEndDate	8/7/2020	10/18/2019

## Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblConstructionPhase	PhaseEndDate	4/29/2033	6/21/2024
tblConstructionPhase	PhaseStartDate	4/30/2033	1/19/2023
tblConstructionPhase	PhaseStartDate	8/8/2020	10/19/2019
tblConstructionPhase	PhaseStartDate	6/26/2032	8/19/2023
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	951.67	0.00
tblEnergyUse	T24NG	24,566.15	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	499.80	0.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	MaterialImported	0.00	52,300.00
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	689.62	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00



## Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	38,310,567.07	0.00
tblWater	OutdoorWaterUseRate	24,152,314.02	0.00
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	13.0626	127.8898	100.1824	0.3620	24.9477	4.8459	29.7936	10.9247	4.4605	15.3851	0.0000	36,856.7818	36,856.7818	3.9767	0.0000	36,919.1338
2020	11.8353	85.9475	91.9563	0.3552	21.2088	1.6450	22.8539	5.7104	1.5488	7.2592	0.0000	36,141.1001	36,141.1001	2.3390	0.0000	36,199.5759
2021	10.7937	77.4681	85.0704	0.3481	21.2087	1.2316	22.4403	5.7103	1.1563	6.8666	0.0000	35,440.6431	35,440.6431	2.2226	0.0000	35,496.2071
2022	10.0147	71.9832	79.6819	0.3407	21.2085	1.0517	22.2603	5.7103	0.9877	6.6979	0.0000	34,697.8432	34,697.8432	2.1173	0.0000	34,750.7754
2023	30.5411	59.9473	86.6114	0.3653	24.6958	0.9986	25.6944	6.6351	0.9424	7.5775	0.0000	37,120.5407	37,120.5407	1.9094	0.0000	37,168.2756
2024	23.2336	11.7996	26.6886	0.0580	3.6551	0.5700	4.2251	0.9694	0.5309	1.5003	0.0000	5,694.6461	5,694.6461	0.7961	0.0000	5,714.5494
<b>Maximum</b>	<b>30.5411</b>	<b>127.8898</b>	<b>100.1824</b>	<b>0.3653</b>	<b>24.9477</b>	<b>4.8459</b>	<b>29.7936</b>	<b>10.9247</b>	<b>4.4605</b>	<b>15.3851</b>	<b>0.0000</b>	<b>37,120.5407</b>	<b>37,120.5407</b>	<b>3.9767</b>	<b>0.0000</b>	<b>37,168.2756</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</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	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	10/18/2019	5	100	
2	Building Construction	Building Construction	10/19/2019	8/18/2023	5	1000	
3	Architectural Coating	Architectural Coating	1/19/2023	9/25/2024	5	440	
4	Paving	Paving	8/19/2023	6/21/2024	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 500

Acres of Paving: 73.72

Residential Indoor: 2,681,337; Residential Outdoor: 893,779; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 192,675 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	6,538.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,560.00	589.00	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	312.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.4350	0.0000	23.4350	10.5133	0.0000	10.5133			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006		11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>23.4350</b>	<b>4.7833</b>	<b>28.2183</b>	<b>10.5133</b>	<b>4.4006</b>	<b>14.9139</b>		<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3673	16.7020	2.0085	0.0503	1.1439	0.0604	1.2042	0.3136	0.0578	0.3713		5,334.954 0	5,334.954 0	0.3315		5,343.240 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1817	0.1115	1.4660	3.7700e-003	0.3689	2.2800e-003	0.3711	0.0978	2.1000e-003	0.0999		375.3824	375.3824	0.0105		375.6451
<b>Total</b>	<b>0.5490</b>	<b>16.8135</b>	<b>3.4745</b>	<b>0.0541</b>	<b>1.5127</b>	<b>0.0626</b>	<b>1.5753</b>	<b>0.4114</b>	<b>0.0599</b>	<b>0.4712</b>		<b>5,710.336 4</b>	<b>5,710.336 4</b>	<b>0.3420</b>		<b>5,718.885 6</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1397	0.0000	9.1397	4.1002	0.0000	4.1002			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006	0.0000	11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>9.1397</b>	<b>4.7833</b>	<b>13.9229</b>	<b>4.1002</b>	<b>4.4006</b>	<b>8.5008</b>	<b>0.0000</b>	<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3673	16.7020	2.0085	0.0503	1.1439	0.0604	1.2042	0.3136	0.0578	0.3713		5,334.954 0	5,334.954 0	0.3315		5,343.240 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1817	0.1115	1.4660	3.7700e- 003	0.3689	2.2800e- 003	0.3711	0.0978	2.1000e- 003	0.0999		375.3824	375.3824	0.0105		375.6451
<b>Total</b>	<b>0.5490</b>	<b>16.8135</b>	<b>3.4745</b>	<b>0.0541</b>	<b>1.5127</b>	<b>0.0626</b>	<b>1.5753</b>	<b>0.4114</b>	<b>0.0599</b>	<b>0.4712</b>		<b>5,710.336 4</b>	<b>5,710.336 4</b>	<b>0.3420</b>		<b>5,718.885 6</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9618	67.0479	12.5646	0.1550	3.7719	0.5093	4.2812	1.0860	0.4872	1.5732		16,333.1239	16,333.1239	1.3069		16,365.7958
Worker	8.5893	5.2712	69.3038	0.1783	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		17,745.3482	17,745.3482	0.4968		17,757.7681
<b>Total</b>	<b>10.5512</b>	<b>72.3191</b>	<b>81.8685</b>	<b>0.3332</b>	<b>21.2090</b>	<b>0.6169</b>	<b>21.8259</b>	<b>5.7104</b>	<b>0.5864</b>	<b>6.2968</b>		<b>34,078.4721</b>	<b>34,078.4721</b>	<b>1.8037</b>		<b>34,123.5638</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

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

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9618	67.0479	12.5646	0.1550	3.7719	0.5093	4.2812	1.0860	0.4872	1.5732		16,333.1239	16,333.1239	1.3069		16,365.7958
Worker	8.5893	5.2712	69.3038	0.1783	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		17,745.3482	17,745.3482	0.4968		17,757.7681
<b>Total</b>	<b>10.5512</b>	<b>72.3191</b>	<b>81.8685</b>	<b>0.3332</b>	<b>21.2090</b>	<b>0.6169</b>	<b>21.8259</b>	<b>5.7104</b>	<b>0.5864</b>	<b>6.2968</b>		<b>34,078.4721</b>	<b>34,078.4721</b>	<b>1.8037</b>		<b>34,123.5638</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.6417	60.6033	11.0869	0.1539	3.7717	0.3447	4.1164	1.0860	0.3298	1.4157		16,220.5254	16,220.5254	1.2166		16,250.9408
Worker	7.9385	4.6949	62.9015	0.1726	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		17,184.8748	17,184.8748	0.4405		17,195.8871
<b>Total</b>	<b>9.5802</b>	<b>65.2981</b>	<b>73.9885</b>	<b>0.3264</b>	<b>21.2088</b>	<b>0.4503</b>	<b>21.6591</b>	<b>5.7104</b>	<b>0.4270</b>	<b>6.1374</b>		<b>33,405.4002</b>	<b>33,405.4002</b>	<b>1.6571</b>		<b>33,446.8278</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.6417	60.6033	11.0869	0.1539	3.7717	0.3447	4.1164	1.0860	0.3298	1.4157		16,220.5254	16,220.5254	1.2166		16,250.9408
Worker	7.9385	4.6949	62.9015	0.1726	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		17,184.8748	17,184.8748	0.4405		17,195.8871
<b>Total</b>	<b>9.5802</b>	<b>65.2981</b>	<b>73.9885</b>	<b>0.3264</b>	<b>21.2088</b>	<b>0.4503</b>	<b>21.6591</b>	<b>5.7104</b>	<b>0.4270</b>	<b>6.1374</b>		<b>33,405.4002</b>	<b>33,405.4002</b>	<b>1.6571</b>		<b>33,446.8278</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>		<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3751	54.5056	9.7247	0.1526	3.7716	0.1037	3.8753	1.0859	0.0992	1.1851		16,094.4852	16,094.4852	1.1514		16,123.2703
Worker	7.3959	4.2134	57.6750	0.1667	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		16,610.1142	16,610.1142	0.3961		16,620.0156
<b>Total</b>	<b>8.7710</b>	<b>58.7189</b>	<b>67.3998</b>	<b>0.3193</b>	<b>21.2087</b>	<b>0.2064</b>	<b>21.4151</b>	<b>5.7103</b>	<b>0.1938</b>	<b>5.9041</b>		<b>32,704.5994</b>	<b>32,704.5994</b>	<b>1.5475</b>		<b>32,743.2859</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>	<b>0.0000</b>	<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3751	54.5056	9.7247	0.1526	3.7716	0.1037	3.8753	1.0859	0.0992	1.1851		16,094.4852	16,094.4852	1.1514		16,123.2703
Worker	7.3959	4.2134	57.6750	0.1667	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		16,610.1142	16,610.1142	0.3961		16,620.0156
<b>Total</b>	<b>8.7710</b>	<b>58.7189</b>	<b>67.3998</b>	<b>0.3193</b>	<b>21.2087</b>	<b>0.2064</b>	<b>21.4151</b>	<b>5.7103</b>	<b>0.1938</b>	<b>5.9041</b>		<b>32,704.5994</b>	<b>32,704.5994</b>	<b>1.5475</b>		<b>32,743.2859</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2822	51.4244	9.0451	0.1513	3.7714	0.0872	3.8586	1.0859	0.0834	1.1692		15,957.4930	15,957.4930	1.0905		15,984.7545
Worker	6.9179	3.7918	53.1976	0.1606	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		16,003.1982	16,003.1982	0.3558		16,012.0921
<b>Total</b>	<b>8.2001</b>	<b>55.2162</b>	<b>62.2427</b>	<b>0.3119</b>	<b>21.2085</b>	<b>0.1872</b>	<b>21.3958</b>	<b>5.7103</b>	<b>0.1755</b>	<b>5.8857</b>		<b>31,960.6912</b>	<b>31,960.6912</b>	<b>1.4462</b>		<b>31,996.8466</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2822	51.4244	9.0451	0.1513	3.7714	0.0872	3.8586	1.0859	0.0834	1.1692		15,957.4930	15,957.4930	1.0905		15,984.7545
Worker	6.9179	3.7918	53.1976	0.1606	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		16,003.1982	16,003.1982	0.3558		16,012.0921
<b>Total</b>	<b>8.2001</b>	<b>55.2162</b>	<b>62.2427</b>	<b>0.3119</b>	<b>21.2085</b>	<b>0.1872</b>	<b>21.3958</b>	<b>5.7103</b>	<b>0.1755</b>	<b>5.8857</b>		<b>31,960.6912</b>	<b>31,960.6912</b>	<b>1.4462</b>		<b>31,996.8466</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9834	38.6690	7.9725	0.1472	3.7713	0.0389	3.8102	1.0858	0.0372	1.1230		15,533.0813	15,533.0813	0.8368		15,554.0000
Worker	6.4863	3.4194	49.0950	0.1545	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		15,395.0349	15,395.0349	0.3193		15,403.0178
<b>Total</b>	<b>7.4697</b>	<b>42.0883</b>	<b>57.0675</b>	<b>0.3016</b>	<b>21.2084</b>	<b>0.1366</b>	<b>21.3450</b>	<b>5.7102</b>	<b>0.1271</b>	<b>5.8373</b>		<b>30,928.1162</b>	<b>30,928.1162</b>	<b>1.1561</b>		<b>30,957.0179</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9834	38.6690	7.9725	0.1472	3.7713	0.0389	3.8102	1.0858	0.0372	1.1230		15,533.0813	15,533.0813	0.8368		15,554.0000
Worker	6.4863	3.4194	49.0950	0.1545	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		15,395.0349	15,395.0349	0.3193		15,403.0178
<b>Total</b>	<b>7.4697</b>	<b>42.0883</b>	<b>57.0675</b>	<b>0.3016</b>	<b>21.2084</b>	<b>0.1366</b>	<b>21.3450</b>	<b>5.7102</b>	<b>0.1271</b>	<b>5.8373</b>		<b>30,928.1162</b>	<b>30,928.1162</b>	<b>1.1561</b>		<b>30,957.0179</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2973	0.6839	9.8190	0.0309	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		3,079.0070	3,079.0070	0.0639		3,080.6036
<b>Total</b>	<b>1.2973</b>	<b>0.6839</b>	<b>9.8190</b>	<b>0.0309</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>3,079.0070</b>	<b>3,079.0070</b>	<b>0.0639</b>		<b>3,080.6036</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2973	0.6839	9.8190	0.0309	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		3,079.0070	3,079.0070	0.0639		3,080.6036
<b>Total</b>	<b>1.2973</b>	<b>0.6839</b>	<b>9.8190</b>	<b>0.0309</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>3,079.0070</b>	<b>3,079.0070</b>	<b>0.0639</b>		<b>3,080.6036</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2226	0.6202	9.2067	0.0298	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,969.0902	2,969.0902	0.0582		2,970.5461
<b>Total</b>	<b>1.2226</b>	<b>0.6202</b>	<b>9.2067</b>	<b>0.0298</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,969.0902</b>	<b>2,969.0902</b>	<b>0.0582</b>		<b>2,970.5461</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2226	0.6202	9.2067	0.0298	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,969.090 2	2,969.090 2	0.0582		2,970.546 1
<b>Total</b>	<b>1.2226</b>	<b>0.6202</b>	<b>9.2067</b>	<b>0.0298</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,969.090 2</b>	<b>2,969.090 2</b>	<b>0.0582</b>		<b>2,970.546 1</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		148.0292	148.0292	3.0700e-003		148.1059
<b>Total</b>	<b>0.0624</b>	<b>0.0329</b>	<b>0.4721</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>148.0292</b>	<b>148.0292</b>	<b>3.0700e-003</b>		<b>148.1059</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		148.0292	148.0292	3.0700e-003		148.1059
<b>Total</b>	<b>0.0624</b>	<b>0.0329</b>	<b>0.4721</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>148.0292</b>	<b>148.0292</b>	<b>3.0700e-003</b>		<b>148.1059</b>



Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
<b>Total</b>	<b>0.0588</b>	<b>0.0298</b>	<b>0.4426</b>	<b>1.4300e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>142.7447</b>	<b>142.7447</b>	<b>2.8000e-003</b>		<b>142.8147</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
<b>Total</b>	<b>0.0588</b>	<b>0.0298</b>	<b>0.4426</b>	<b>1.4300e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>142.7447</b>	<b>142.7447</b>	<b>2.8000e-003</b>		<b>142.8147</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Unmitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

**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**

Rancho Diamante Phase 1 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**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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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 2 (Construction - Unmitigated)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Architectural Coating activities to be conducted simultaneous with Paving activities.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

Off-road Equipment -

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

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation -

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseStartDate	1/29/2026	1/1/2026
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	1.92	0.00

## Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	105.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	0.00
tblWater	OutdoorWaterUseRate	4,539,928.74	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	6.6111	66.2471	48.3574	0.1189	23.7376	2.7229	26.4605	10.6011	2.5051	13.1061	0.0000	11,524.1263	11,524.1263	3.6414	0.0000	11,615.1612
2025	1.6008	14.4454	18.0752	0.0353	0.4601	0.5677	1.0278	0.1244	0.5332	0.6576	0.0000	3,404.1152	3,404.1152	0.6889	0.0000	3,421.3379
2026	12.8040	10.1449	17.4201	0.0284	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,747.8380	2,747.8380	0.7370	0.0000	2,766.2631
<b>Maximum</b>	<b>12.8040</b>	<b>66.2471</b>	<b>48.3574</b>	<b>0.1189</b>	<b>23.7376</b>	<b>2.7229</b>	<b>26.4605</b>	<b>10.6011</b>	<b>2.5051</b>	<b>13.1061</b>	<b>0.0000</b>	<b>11,524.1263</b>	<b>11,524.1263</b>	<b>3.6414</b>	<b>0.0000</b>	<b>11,615.1612</b>

**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					
2024	6.6111	66.2471	48.3574	0.1189	9.4827	2.7229	12.2056	4.1941	2.5051	6.6991	0.0000	11,524.1263	11,524.1263	3.6414	0.0000	11,615.1612
2025	1.6008	14.4454	18.0752	0.0353	0.4601	0.5677	1.0278	0.1244	0.5332	0.6576	0.0000	3,404.1152	3,404.1152	0.6889	0.0000	3,421.3379
2026	12.8040	10.1449	17.4201	0.0284	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,747.8380	2,747.8380	0.7370	0.0000	2,766.2631
<b>Maximum</b>	<b>12.8040</b>	<b>66.2471</b>	<b>48.3574</b>	<b>0.1189</b>	<b>9.4827</b>	<b>2.7229</b>	<b>12.2056</b>	<b>4.1941</b>	<b>2.5051</b>	<b>6.6991</b>	<b>0.0000</b>	<b>11,524.1263</b>	<b>11,524.1263</b>	<b>3.6414</b>	<b>0.0000</b>	<b>11,615.1612</b>

## Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	58.34	0.00	50.53	59.39	0.00	44.86	0.00	0.00	0.00	0.00	0.00	0.00

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	11/6/2024	5	30	
2	Building Construction	Building Construction	11/7/2024	12/31/2025	5	300	
3	Paving	Paving	1/1/2026	1/28/2026	5	20	
4	Architectural Coating	Architectural Coating	1/1/2026	2/25/2026	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	16.00	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	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area



Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.3688	0.0000	23.3688	10.5032	0.0000	10.5032			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032		11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>23.3688</b>	<b>2.7208</b>	<b>26.0896</b>	<b>10.5032</b>	<b>2.5032</b>	<b>13.0064</b>		<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
<b>Total</b>	<b>0.1281</b>	<b>0.0677</b>	<b>0.7819</b>	<b>2.8200e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>281.7122</b>	<b>281.7122</b>	<b>5.3700e-003</b>		<b>281.8465</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1138	0.0000	9.1138	4.0963	0.0000	4.0963			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032	0.0000	11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>9.1138</b>	<b>2.7208</b>	<b>11.8347</b>	<b>4.0963</b>	<b>2.5032</b>	<b>6.5994</b>	<b>0.0000</b>	<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
<b>Total</b>	<b>0.1281</b>	<b>0.0677</b>	<b>0.7819</b>	<b>2.8200e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>281.7122</b>	<b>281.7122</b>	<b>5.3700e-003</b>		<b>281.8465</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166		2,738.7124	2,738.7124	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>		<b>2,738.7124</b>	<b>2,738.7124</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	1.0306	0.2421	3.8300e-003	0.1024	1.0800e-003	0.1035	0.0295	1.0400e-003	0.0305		404.8021	404.8021	0.0246		405.4182
Worker	0.1242	0.0657	0.7583	2.7400e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		273.1755	273.1755	5.2100e-003		273.3057
<b>Total</b>	<b>0.1520</b>	<b>1.0963</b>	<b>1.0003</b>	<b>6.5700e-003</b>	<b>0.4601</b>	<b>3.0600e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8600e-003</b>	<b>0.1272</b>		<b>677.9776</b>	<b>677.9776</b>	<b>0.0299</b>		<b>678.7239</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166	0.0000	2,738.7123	2,738.7123	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>	<b>0.0000</b>	<b>2,738.7123</b>	<b>2,738.7123</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	1.0306	0.2421	3.8300e-003	0.1024	1.0800e-003	0.1035	0.0295	1.0400e-003	0.0305		404.8021	404.8021	0.0246		405.4182
Worker	0.1242	0.0657	0.7583	2.7400e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		273.1755	273.1755	5.2100e-003		273.3057
<b>Total</b>	<b>0.1520</b>	<b>1.0963</b>	<b>1.0003</b>	<b>6.5700e-003</b>	<b>0.4601</b>	<b>3.0600e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8600e-003</b>	<b>0.1272</b>		<b>677.9776</b>	<b>677.9776</b>	<b>0.0299</b>		<b>678.7239</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304		2,739.5986	2,739.5986	0.6602		2,756.1030
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>		<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1030</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	1.0192	0.2344	3.8100e-003	0.1024	1.0700e-003	0.1035	0.0295	1.0200e-003	0.0305		402.2726	402.2726	0.0240		402.8728
Worker	0.1177	0.0598	0.7030	2.6300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		262.2440	262.2440	4.7200e-003		262.3621
<b>Total</b>	<b>0.1447</b>	<b>1.0790</b>	<b>0.9373</b>	<b>6.4400e-003</b>	<b>0.4601</b>	<b>3.0200e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.8100e-003</b>	<b>0.1272</b>		<b>664.5166</b>	<b>664.5166</b>	<b>0.0287</b>		<b>665.2349</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304	0.0000	2,739.5986	2,739.5986	0.6602		2,756.1029
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>	<b>0.0000</b>	<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1029</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	1.0192	0.2344	3.8100e-003	0.1024	1.0700e-003	0.1035	0.0295	1.0200e-003	0.0305		402.2726	402.2726	0.0240		402.8728
Worker	0.1177	0.0598	0.7030	2.6300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		262.2440	262.2440	4.7200e-003		262.3621
<b>Total</b>	<b>0.1447</b>	<b>1.0790</b>	<b>0.9373</b>	<b>6.4400e-003</b>	<b>0.4601</b>	<b>3.0200e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.8100e-003</b>	<b>0.1272</b>		<b>664.5166</b>	<b>664.5166</b>	<b>0.0287</b>		<b>665.2349</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Paving - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
<b>Total</b>	<b>0.0525</b>	<b>0.0257</b>	<b>0.3071</b>	<b>1.1900e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>118.4491</b>	<b>118.4491</b>	<b>2.0200e-003</b>		<b>118.4996</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.4 Paving - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
<b>Total</b>	<b>0.0525</b>	<b>0.0257</b>	<b>0.3071</b>	<b>1.1900e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>118.4491</b>	<b>118.4491</b>	<b>2.0200e-003</b>		<b>118.4996</b>



Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0103	0.1228	4.7000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		47.3797	47.3797	8.1000e-004		47.3998
<b>Total</b>	<b>0.0210</b>	<b>0.0103</b>	<b>0.1228</b>	<b>4.7000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>47.3797</b>	<b>47.3797</b>	<b>8.1000e-004</b>		<b>47.3998</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0103	0.1228	4.7000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		47.3797	47.3797	8.1000e-004		47.3998
<b>Total</b>	<b>0.0210</b>	<b>0.0103</b>	<b>0.1228</b>	<b>4.7000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>47.3797</b>	<b>47.3797</b>	<b>8.1000e-004</b>		<b>47.3998</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**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

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 2 (Construction - Unmitigated)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Architectural Coating activities to be conducted simultaneous with Paving activities.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

Off-road Equipment -

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

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

Construction Off-road Equipment Mitigation -

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseStartDate	1/29/2026	1/1/2026
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	1.92	0.00

## Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	105.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	0.00
tblWater	OutdoorWaterUseRate	4,539,928.74	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	6.6123	66.2450	48.5492	0.1193	23.7376	2.7229	26.4605	10.6011	2.5051	13.1061	0.0000	11,556.45 25	11,556.45 25	3.6422	0.0000	11,647.50 71
2025	1.6001	14.4577	18.2161	0.0357	0.4601	0.5677	1.0278	0.1244	0.5332	0.6575	0.0000	3,449.482 5	3,449.482 5	0.6873	0.0000	3,466.664 0
2026	12.8043	10.1438	17.5266	0.0286	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,766.852 5	2,766.852 5	0.7374	0.0000	2,785.287 9
<b>Maximum</b>	<b>12.8043</b>	<b>66.2450</b>	<b>48.5492</b>	<b>0.1193</b>	<b>23.7376</b>	<b>2.7229</b>	<b>26.4605</b>	<b>10.6011</b>	<b>2.5051</b>	<b>13.1061</b>	<b>0.0000</b>	<b>11,556.45 25</b>	<b>11,556.45 25</b>	<b>3.6422</b>	<b>0.0000</b>	<b>11,647.50 71</b>

**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					
2024	6.6123	66.2450	48.5492	0.1193	9.4827	2.7229	12.2056	4.1941	2.5051	6.6991	0.0000	11,556.45 25	11,556.45 25	3.6422	0.0000	11,647.50 71
2025	1.6001	14.4577	18.2161	0.0357	0.4601	0.5677	1.0278	0.1244	0.5332	0.6575	0.0000	3,449.482 5	3,449.482 5	0.6873	0.0000	3,466.664 0
2026	12.8043	10.1438	17.5266	0.0286	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,766.852 5	2,766.852 5	0.7374	0.0000	2,785.287 9
<b>Maximum</b>	<b>12.8043</b>	<b>66.2450</b>	<b>48.5492</b>	<b>0.1193</b>	<b>9.4827</b>	<b>2.7229</b>	<b>12.2056</b>	<b>4.1941</b>	<b>2.5051</b>	<b>6.6991</b>	<b>0.0000</b>	<b>11,556.45 25</b>	<b>11,556.45 25</b>	<b>3.6422</b>	<b>0.0000</b>	<b>11,647.50 71</b>

## Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	58.34	0.00	50.53	59.39	0.00	44.86	0.00	0.00	0.00	0.00	0.00	0.00

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	11/6/2024	5	30	
2	Building Construction	Building Construction	11/7/2024	12/31/2025	5	300	
3	Paving	Paving	1/1/2026	1/28/2026	5	20	
4	Architectural Coating	Architectural Coating	1/1/2026	2/25/2026	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	16.00	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	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area



Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.3688	0.0000	23.3688	10.5032	0.0000	10.5032			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032		11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>23.3688</b>	<b>2.7208</b>	<b>26.0896</b>	<b>10.5032</b>	<b>2.5032</b>	<b>13.0064</b>		<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
<b>Total</b>	<b>0.1293</b>	<b>0.0656</b>	<b>0.9738</b>	<b>3.1500e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>314.0384</b>	<b>314.0384</b>	<b>6.1600e-003</b>		<b>314.1924</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1138	0.0000	9.1138	4.0963	0.0000	4.0963			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032	0.0000	11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>9.1138</b>	<b>2.7208</b>	<b>11.8347</b>	<b>4.0963</b>	<b>2.5032</b>	<b>6.5994</b>	<b>0.0000</b>	<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
<b>Total</b>	<b>0.1293</b>	<b>0.0656</b>	<b>0.9738</b>	<b>3.1500e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>314.0384</b>	<b>314.0384</b>	<b>6.1600e-003</b>		<b>314.1924</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166		2,738.7124	2,738.7124	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>		<b>2,738.7124</b>	<b>2,738.7124</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	1.0447	0.2092	3.9800e-003	0.1024	1.0500e-003	0.1035	0.0295	1.0100e-003	0.0305		420.3005	420.3005	0.0222		420.8565
Worker	0.1254	0.0636	0.9443	3.0500e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		304.5221	304.5221	5.9700e-003		304.6714
<b>Total</b>	<b>0.1516</b>	<b>1.1083</b>	<b>1.1535</b>	<b>7.0300e-003</b>	<b>0.4601</b>	<b>3.0300e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8300e-003</b>	<b>0.1272</b>		<b>724.8226</b>	<b>724.8226</b>	<b>0.0282</b>		<b>725.5278</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166	0.0000	2,738.7123	2,738.7123	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>	<b>0.0000</b>	<b>2,738.7123</b>	<b>2,738.7123</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	1.0447	0.2092	3.9800e-003	0.1024	1.0500e-003	0.1035	0.0295	1.0100e-003	0.0305		420.3005	420.3005	0.0222		420.8565
Worker	0.1254	0.0636	0.9443	3.0500e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		304.5221	304.5221	5.9700e-003		304.6714
<b>Total</b>	<b>0.1516</b>	<b>1.1083</b>	<b>1.1535</b>	<b>7.0300e-003</b>	<b>0.4601</b>	<b>3.0300e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8300e-003</b>	<b>0.1272</b>		<b>724.8226</b>	<b>724.8226</b>	<b>0.0282</b>		<b>725.5278</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304		2,739.5986	2,739.5986	0.6602		2,756.1030
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>		<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1030</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0255	1.0335	0.2021	3.9500e-003	0.1024	1.0400e-003	0.1035	0.0295	9.9000e-004	0.0305		417.5658	417.5658	0.0217		418.1076
Worker	0.1185	0.0579	0.8762	2.9300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		292.3181	292.3181	5.4100e-003		292.4535
<b>Total</b>	<b>0.1440</b>	<b>1.0914</b>	<b>1.0783</b>	<b>6.8800e-003</b>	<b>0.4601</b>	<b>2.9900e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.7800e-003</b>	<b>0.1271</b>		<b>709.8839</b>	<b>709.8839</b>	<b>0.0271</b>		<b>710.5610</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304	0.0000	2,739.5986	2,739.5986	0.6602		2,756.1029
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>	<b>0.0000</b>	<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1029</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0255	1.0335	0.2021	3.9500e-003	0.1024	1.0400e-003	0.1035	0.0295	9.9000e-004	0.0305		417.5658	417.5658	0.0217		418.1076
Worker	0.1185	0.0579	0.8762	2.9300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		292.3181	292.3181	5.4100e-003		292.4535
<b>Total</b>	<b>0.1440</b>	<b>1.0914</b>	<b>1.0783</b>	<b>6.8800e-003</b>	<b>0.4601</b>	<b>2.9900e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.7800e-003</b>	<b>0.1271</b>		<b>709.8839</b>	<b>709.8839</b>	<b>0.0271</b>		<b>710.5610</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Paving - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
<b>Total</b>	<b>0.0527</b>	<b>0.0249</b>	<b>0.3832</b>	<b>1.3200e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>132.0309</b>	<b>132.0309</b>	<b>2.3100e-003</b>		<b>132.0888</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.4 Paving - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
<b>Total</b>	<b>0.0527</b>	<b>0.0249</b>	<b>0.3832</b>	<b>1.3200e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>132.0309</b>	<b>132.0309</b>	<b>2.3100e-003</b>		<b>132.0888</b>



Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	9.9500e-003	0.1533	5.3000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		52.8124	52.8124	9.3000e-004		52.8355
<b>Total</b>	<b>0.0211</b>	<b>9.9500e-003</b>	<b>0.1533</b>	<b>5.3000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>52.8124</b>	<b>52.8124</b>	<b>9.3000e-004</b>		<b>52.8355</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	9.9500e-003	0.1533	5.3000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		52.8124	52.8124	9.3000e-004		52.8355
<b>Total</b>	<b>0.0211</b>	<b>9.9500e-003</b>	<b>0.1533</b>	<b>5.3000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>52.8124</b>	<b>52.8124</b>	<b>9.3000e-004</b>		<b>52.8355</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**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**

Rancho Diamante Phase 2 (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

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

Equipment Type	Number
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**11.0 Vegetation**

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**APPENDIX 3.2:**

**CALEEMOD CONSTRUCTION (MITIGATED) EMISSIONS MODEL OUTPUTS**

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 1 (Construction - Mitigated)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Average Lot Area: 6,434 SF; Average home size is assumed to be 35% maximum coverage of lot area.

Construction Phase - Construction Schedule adjusted to meet operational year.

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

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

Off-road Equipment - Equipment list adjusted based on past Project experience.

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Woodstoves - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	440.00
tblConstructionPhase	NumDays	3,100.00	1,000.00
tblConstructionPhase	NumDays	310.00	100.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	951.67	0.00
tblEnergyUse	T24NG	24,566.15	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	499.80	0.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	MaterialImported	0.00	52,300.00
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

## Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

tblSolidWaste	SolidWasteGenerationRate	689.62	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	38,310,567.07	0.00
tblWater	OutdoorWaterUseRate	24,152,314.02	0.00
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	12.9633	128.0620	89.0911	0.3378	24.9477	4.8470	29.7947	10.9247	4.4615	15.3861	0.0000	34,421.06 30	34,421.06 30	4.0068	0.0000	34,485.41 83
2020	11.7610	85.7921	81.8324	0.3316	21.2088	1.6491	22.8580	5.7104	1.5527	7.2631	0.0000	33,763.19 70	33,763.19 70	2.4187	0.0000	33,823.66 37
2021	10.7411	77.1428	75.7295	0.3252	21.2087	1.2347	22.4434	5.7103	1.1592	6.8695	0.0000	33,126.18 58	33,126.18 58	2.3024	0.0000	33,183.74 52
2022	9.9872	71.5962	71.0534	0.3184	21.2085	1.0545	22.2631	5.7103	0.9904	6.7006	0.0000	32,448.32 20	32,448.32 20	2.1970	0.0000	32,503.24 69
2023	30.5012	59.5583	76.3463	0.3407	24.6958	0.9999	25.6957	6.6351	0.9437	7.5787	0.0000	34,643.19 64	34,643.19 64	1.9510	0.0000	34,691.97 03
2024	23.2213	11.8209	24.7876	0.0548	3.6551	0.5700	4.2251	0.9694	0.5309	1.5003	0.0000	5,374.323 1	5,374.323 1	0.7883	0.0000	5,394.031 0
<b>Maximum</b>	<b>30.5012</b>	<b>128.0620</b>	<b>89.0911</b>	<b>0.3407</b>	<b>24.9477</b>	<b>4.8470</b>	<b>29.7947</b>	<b>10.9247</b>	<b>4.4615</b>	<b>15.3861</b>	<b>0.0000</b>	<b>34,643.19 64</b>	<b>34,643.19 64</b>	<b>4.0068</b>	<b>0.0000</b>	<b>34,691.97 03</b>





Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</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	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	10/18/2019	5	100	
2	Building Construction	Building Construction	10/19/2019	8/18/2023	5	1000	
3	Architectural Coating	Architectural Coating	1/19/2023	9/25/2024	5	440	
4	Paving	Paving	8/19/2023	6/21/2024	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 500

Acres of Paving: 73.72

Residential Indoor: 2,681,337; Residential Outdoor: 893,779; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 192,675 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	6,538.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,560.00	589.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	312.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.4350	0.0000	23.4350	10.5133	0.0000	10.5133			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006		11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>23.4350</b>	<b>4.7833</b>	<b>28.2183</b>	<b>10.5133</b>	<b>4.4006</b>	<b>14.9139</b>		<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3862	16.8702	2.3612	0.0491	1.1439	0.0614	1.2053	0.3136	0.0588	0.3724		5,202.654 0	5,202.654 0	0.3629		5,211.727 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1775	0.1154	1.1882	3.3800e-003	0.3689	2.2800e-003	0.3711	0.0978	2.1000e-003	0.0999		336.7707	336.7707	9.1400e-003		336.9991
<b>Total</b>	<b>0.5637</b>	<b>16.9857</b>	<b>3.5494</b>	<b>0.0524</b>	<b>1.5127</b>	<b>0.0637</b>	<b>1.5764</b>	<b>0.4114</b>	<b>0.0609</b>	<b>0.4723</b>		<b>5,539.424 7</b>	<b>5,539.424 7</b>	<b>0.3721</b>		<b>5,548.726 2</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1397	0.0000	9.1397	4.1002	0.0000	4.1002			0.0000			0.0000
Off-Road	3.1629	56.8228	65.3768	0.1160		2.3409	2.3409		2.3160	2.3160	0.0000	11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>3.1629</b>	<b>56.8228</b>	<b>65.3768</b>	<b>0.1160</b>	<b>9.1397</b>	<b>2.3409</b>	<b>11.4806</b>	<b>4.1002</b>	<b>2.3160</b>	<b>6.4161</b>	<b>0.0000</b>	<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3862	16.8702	2.3612	0.0491	1.1439	0.0614	1.2053	0.3136	0.0588	0.3724		5,202.654 0	5,202.654 0	0.3629		5,211.727 1
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1775	0.1154	1.1882	3.3800e- 003	0.3689	2.2800e- 003	0.3711	0.0978	2.1000e- 003	0.0999		336.7707	336.7707	9.1400e- 003		336.9991
<b>Total</b>	<b>0.5637</b>	<b>16.9857</b>	<b>3.5494</b>	<b>0.0524</b>	<b>1.5127</b>	<b>0.0637</b>	<b>1.5764</b>	<b>0.4114</b>	<b>0.0609</b>	<b>0.4723</b>		<b>5,539.424 7</b>	<b>5,539.424 7</b>	<b>0.3721</b>		<b>5,548.726 2</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0593	66.8952	14.6086	0.1492	3.7719	0.5156	4.2875	1.0860	0.4933	1.5793		15,722.6857	15,722.6857	1.4518		15,758.9813
Worker	8.3925	5.4567	56.1686	0.1598	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		15,920.0676	15,920.0676	0.4320		15,930.8671
<b>Total</b>	<b>10.4518</b>	<b>72.3519</b>	<b>70.7772</b>	<b>0.3090</b>	<b>21.2090</b>	<b>0.6233</b>	<b>21.8323</b>	<b>5.7104</b>	<b>0.5924</b>	<b>6.3028</b>		<b>31,642.7533</b>	<b>31,642.7533</b>	<b>1.8838</b>		<b>31,689.8483</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1492	19.4403	19.0928	0.0288		1.2296	1.2296		1.1655	1.1655	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.1492</b>	<b>19.4403</b>	<b>19.0928</b>	<b>0.0288</b>		<b>1.2296</b>	<b>1.2296</b>		<b>1.1655</b>	<b>1.1655</b>	<b>0.0000</b>	<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	2.0593	66.8952	14.6086	0.1492	3.7719	0.5156	4.2875	1.0860	0.4933	1.5793		15,722.6857	15,722.6857	1.4518		15,758.9813
Worker	8.3925	5.4567	56.1686	0.1598	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		15,920.0676	15,920.0676	0.4320		15,930.8671
<b>Total</b>	<b>10.4518</b>	<b>72.3519</b>	<b>70.7772</b>	<b>0.3090</b>	<b>21.2090</b>	<b>0.6233</b>	<b>21.8323</b>	<b>5.7104</b>	<b>0.5924</b>	<b>6.3028</b>		<b>31,642.7533</b>	<b>31,642.7533</b>	<b>1.8838</b>		<b>31,689.8483</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7316	60.2859	12.9816	0.1481	3.7717	0.3488	4.1205	1.0860	0.3337	1.4196		15,611.0187	15,611.0187	1.3538		15,644.8644
Worker	7.7743	4.8569	50.8831	0.1547	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		15,416.4784	15,416.4784	0.3829		15,426.0512
<b>Total</b>	<b>9.5059</b>	<b>65.1427</b>	<b>63.8646</b>	<b>0.3028</b>	<b>21.2088</b>	<b>0.4544</b>	<b>21.6632</b>	<b>5.7104</b>	<b>0.4309</b>	<b>6.1412</b>		<b>31,027.4971</b>	<b>31,027.4971</b>	<b>1.7367</b>		<b>31,070.9156</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**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	1.9435	17.9990	18.9244	0.0288		1.0765	1.0765		1.0213	1.0213	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>1.9435</b>	<b>17.9990</b>	<b>18.9244</b>	<b>0.0288</b>		<b>1.0765</b>	<b>1.0765</b>		<b>1.0213</b>	<b>1.0213</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.7316	60.2859	12.9816	0.1481	3.7717	0.3488	4.1205	1.0860	0.3337	1.4196		15,611.0187	15,611.0187	1.3538		15,644.8644
Worker	7.7743	4.8569	50.8831	0.1547	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		15,416.4784	15,416.4784	0.3829		15,426.0512
<b>Total</b>	<b>9.5059</b>	<b>65.1427</b>	<b>63.8646</b>	<b>0.3028</b>	<b>21.2088</b>	<b>0.4544</b>	<b>21.6632</b>	<b>5.7104</b>	<b>0.4309</b>	<b>6.1412</b>		<b>31,027.4971</b>	<b>31,027.4971</b>	<b>1.7367</b>		<b>31,070.9156</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>		<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4604	54.0362	11.5038	0.1469	3.7716	0.1068	3.8784	1.0859	0.1021	1.1880		15,489.1226	15,489.1226	1.2830		15,521.1963
Worker	7.2580	4.3574	46.5550	0.1495	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		14,901.0194	14,901.0194	0.3443		14,909.6277
<b>Total</b>	<b>8.7184</b>	<b>58.3936</b>	<b>58.0588</b>	<b>0.2964</b>	<b>21.2087</b>	<b>0.2096</b>	<b>21.4183</b>	<b>5.7103</b>	<b>0.1968</b>	<b>5.9071</b>		<b>30,390.1420</b>	<b>30,390.1420</b>	<b>1.6273</b>		<b>30,430.8240</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2021**

**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	1.7516	16.6409	18.7597	0.0288		0.9322	0.9322		0.8853	0.8853	0.0000	2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>1.7516</b>	<b>16.6409</b>	<b>18.7597</b>	<b>0.0288</b>		<b>0.9322</b>	<b>0.9322</b>		<b>0.8853</b>	<b>0.8853</b>	<b>0.0000</b>	<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4604	54.0362	11.5038	0.1469	3.7716	0.1068	3.8784	1.0859	0.1021	1.1880		15,489.1226	15,489.1226	1.2830		15,521.1963
Worker	7.2580	4.3574	46.5550	0.1495	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		14,901.0194	14,901.0194	0.3443		14,909.6277
<b>Total</b>	<b>8.7184</b>	<b>58.3936</b>	<b>58.0588</b>	<b>0.2964</b>	<b>21.2087</b>	<b>0.2096</b>	<b>21.4183</b>	<b>5.7103</b>	<b>0.1968</b>	<b>5.9071</b>		<b>30,390.1420</b>	<b>30,390.1420</b>	<b>1.6273</b>		<b>30,430.8240</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3636	50.9094	10.7386	0.1456	3.7714	0.0900	3.8614	1.0859	0.0860	1.1719		15,353.8834	15,353.8834	1.2163		15,384.2905
Worker	6.8090	3.9198	42.8757	0.1440	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		14,357.2866	14,357.2866	0.3096		14,365.0276
<b>Total</b>	<b>8.1726</b>	<b>54.8292</b>	<b>53.6142</b>	<b>0.2896</b>	<b>21.2085</b>	<b>0.1900</b>	<b>21.3986</b>	<b>5.7103</b>	<b>0.1781</b>	<b>5.8884</b>		<b>29,711.1700</b>	<b>29,711.1700</b>	<b>1.5259</b>		<b>29,749.3181</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5834	15.3239	18.6187	0.0288		0.7948	0.7948		0.7564	0.7564	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.5834</b>	<b>15.3239</b>	<b>18.6187</b>	<b>0.0288</b>		<b>0.7948</b>	<b>0.7948</b>		<b>0.7564</b>	<b>0.7564</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3636	50.9094	10.7386	0.1456	3.7714	0.0900	3.8614	1.0859	0.0860	1.1719		15,353.8834	15,353.8834	1.2163		15,384.2905
Worker	6.8090	3.9198	42.8757	0.1440	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		14,357.2866	14,357.2866	0.3096		14,365.0276
<b>Total</b>	<b>8.1726</b>	<b>54.8292</b>	<b>53.6142</b>	<b>0.2896</b>	<b>21.2085</b>	<b>0.1900</b>	<b>21.3986</b>	<b>5.7103</b>	<b>0.1781</b>	<b>5.8884</b>		<b>29,711.1700</b>	<b>29,711.1700</b>	<b>1.5259</b>		<b>29,749.3181</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0418	38.1435	9.2076	0.1417	3.7713	0.0402	3.8115	1.0858	0.0384	1.1242		14,954.8652	14,954.8652	0.9275		14,978.0533
Worker	6.4044	3.5332	39.5115	0.1385	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		13,812.4280	13,812.4280	0.2783		13,819.3857
<b>Total</b>	<b>7.4462</b>	<b>41.6767</b>	<b>48.7191</b>	<b>0.2802</b>	<b>21.2084</b>	<b>0.1379</b>	<b>21.3463</b>	<b>5.7102</b>	<b>0.1283</b>	<b>5.8385</b>		<b>28,767.2932</b>	<b>28,767.2932</b>	<b>1.2058</b>		<b>28,797.4390</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4638	14.3633	18.5475	0.0288		0.6927	0.6927		0.6603	0.6603	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.4638</b>	<b>14.3633</b>	<b>18.5475</b>	<b>0.0288</b>		<b>0.6927</b>	<b>0.6927</b>		<b>0.6603</b>	<b>0.6603</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0418	38.1435	9.2076	0.1417	3.7713	0.0402	3.8115	1.0858	0.0384	1.1242		14,954.8652	14,954.8652	0.9275		14,978.0533
Worker	6.4044	3.5332	39.5115	0.1385	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		13,812.4280	13,812.4280	0.2783		13,819.3857
<b>Total</b>	<b>7.4462</b>	<b>41.6767</b>	<b>48.7191</b>	<b>0.2802</b>	<b>21.2084</b>	<b>0.1379</b>	<b>21.3463</b>	<b>5.7102</b>	<b>0.1283</b>	<b>5.8385</b>		<b>28,767.2932</b>	<b>28,767.2932</b>	<b>1.2058</b>		<b>28,797.4390</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2809	0.7066	7.9023	0.0277	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		2,762.4856	2,762.4856	0.0557		2,763.8771
<b>Total</b>	<b>1.2809</b>	<b>0.7066</b>	<b>7.9023</b>	<b>0.0277</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>2,762.4856</b>	<b>2,762.4856</b>	<b>0.0557</b>		<b>2,763.8771</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2809	0.7066	7.9023	0.0277	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		2,762.4856	2,762.4856	0.0557		2,763.8771
<b>Total</b>	<b>1.2809</b>	<b>0.7066</b>	<b>7.9023</b>	<b>0.0277</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>2,762.4856</b>	<b>2,762.4856</b>	<b>0.0557</b>		<b>2,763.8771</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2108	0.6405	7.3929	0.0267	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,663.4609	2,663.4609	0.0508		2,664.7303
<b>Total</b>	<b>1.2108</b>	<b>0.6405</b>	<b>7.3929</b>	<b>0.0267</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,663.4609</b>	<b>2,663.4609</b>	<b>0.0508</b>		<b>2,664.7303</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Architectural Coating - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2108	0.6405	7.3929	0.0267	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,663.4609	2,663.4609	0.0508		2,664.7303
<b>Total</b>	<b>1.2108</b>	<b>0.6405</b>	<b>7.3929</b>	<b>0.0267</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,663.4609</b>	<b>2,663.4609</b>	<b>0.0508</b>		<b>2,664.7303</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		132.8118	132.8118	2.6800e-003		132.8787
<b>Total</b>	<b>0.0616</b>	<b>0.0340</b>	<b>0.3799</b>	<b>1.3300e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>132.8118</b>	<b>132.8118</b>	<b>2.6800e-003</b>		<b>132.8787</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0616	0.0340	0.3799	1.3300e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		132.8118	132.8118	2.6800e-003		132.8787
<b>Total</b>	<b>0.0616</b>	<b>0.0340</b>	<b>0.3799</b>	<b>1.3300e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>132.8118</b>	<b>132.8118</b>	<b>2.6800e-003</b>		<b>132.8787</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
<b>Total</b>	<b>0.0582</b>	<b>0.0308</b>	<b>0.3554</b>	<b>1.2800e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>128.0510</b>	<b>128.0510</b>	<b>2.4400e-003</b>		<b>128.1120</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
<b>Total</b>	<b>0.0582</b>	<b>0.0308</b>	<b>0.3554</b>	<b>1.2800e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>128.0510</b>	<b>128.0510</b>	<b>2.4400e-003</b>		<b>128.1120</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Unmitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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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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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Winter

**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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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 1 (Construction - Mitigated)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Average Lot Area: 6,434 SF; Average home size is assumed to be 35% maximum coverage of lot area.

Construction Phase - Construction Schedule adjusted to meet operational year.

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

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

Off-road Equipment - Equipment list adjusted based on past Project experience.

Off-road Equipment -

Trips and VMT -

Grading -

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Woodstoves - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

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

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	220.00	440.00
tblConstructionPhase	NumDays	3,100.00	1,000.00
tblConstructionPhase	NumDays	310.00	100.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	6,030.00	0.00
tblEnergyUse	T24E	951.67	0.00
tblEnergyUse	T24NG	24,566.15	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	499.80	0.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	MaterialImported	0.00	52,300.00
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00



## Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

tblSolidWaste	SolidWasteGenerationRate	689.62	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	0.00
tblVehicleTrips	HO_TTP	40.60	0.00
tblVehicleTrips	HS_TL	5.90	0.00
tblVehicleTrips	HS_TTP	19.20	0.00
tblVehicleTrips	HW_TL	14.70	0.00
tblVehicleTrips	HW_TTP	40.20	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	38,310,567.07	0.00
tblWater	OutdoorWaterUseRate	24,152,314.02	0.00
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	13.0626	127.8898	100.1824	0.3620	24.9477	4.8459	29.7936	10.9247	4.4605	15.3851	0.0000	36,856.7818	36,856.7818	3.9767	0.0000	36,919.1338
2020	11.8353	85.9475	91.9563	0.3552	21.2088	1.6450	22.8539	5.7104	1.5488	7.2592	0.0000	36,141.1001	36,141.1001	2.3390	0.0000	36,199.5759
2021	10.7937	77.4681	85.0704	0.3481	21.2087	1.2316	22.4403	5.7103	1.1563	6.8666	0.0000	35,440.6431	35,440.6431	2.2226	0.0000	35,496.2071
2022	10.0147	71.9832	79.6819	0.3407	21.2085	1.0517	22.2603	5.7103	0.9877	6.6979	0.0000	34,697.8432	34,697.8432	2.1173	0.0000	34,750.7754
2023	30.5411	59.9473	86.6114	0.3653	24.6958	0.9986	25.6944	6.6351	0.9424	7.5775	0.0000	37,120.5407	37,120.5407	1.9094	0.0000	37,168.2756
2024	23.2336	11.7996	26.6886	0.0580	3.6551	0.5700	4.2251	0.9694	0.5309	1.5003	0.0000	5,694.6461	5,694.6461	0.7961	0.0000	5,714.5494
<b>Maximum</b>	<b>30.5411</b>	<b>127.8898</b>	<b>100.1824</b>	<b>0.3653</b>	<b>24.9477</b>	<b>4.8459</b>	<b>29.7936</b>	<b>10.9247</b>	<b>4.4605</b>	<b>15.3851</b>	<b>0.0000</b>	<b>37,120.5407</b>	<b>37,120.5407</b>	<b>3.9767</b>	<b>0.0000</b>	<b>37,168.2756</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</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	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	10/18/2019	5	100	
2	Building Construction	Building Construction	10/19/2019	8/18/2023	5	1000	
3	Architectural Coating	Architectural Coating	1/19/2023	9/25/2024	5	440	
4	Paving	Paving	8/19/2023	6/21/2024	5	220	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 500

Acres of Paving: 73.72

Residential Indoor: 2,681,337; Residential Outdoor: 893,779; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 192,675 (Architectural Coating – sqft)

#### OffRoad Equipment

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	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
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	6,538.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,560.00	589.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	312.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.4350	0.0000	23.4350	10.5133	0.0000	10.5133			0.0000			0.0000
Off-Road	9.6253	111.0763	59.9059	0.1160		4.7833	4.7833		4.4006	4.4006		11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>9.6253</b>	<b>111.0763</b>	<b>59.9059</b>	<b>0.1160</b>	<b>23.4350</b>	<b>4.7833</b>	<b>28.2183</b>	<b>10.5133</b>	<b>4.4006</b>	<b>14.9139</b>		<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3673	16.7020	2.0085	0.0503	1.1439	0.0604	1.2042	0.3136	0.0578	0.3713		5,334.954 0	5,334.954 0	0.3315		5,343.240 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1817	0.1115	1.4660	3.7700e-003	0.3689	2.2800e-003	0.3711	0.0978	2.1000e-003	0.0999		375.3824	375.3824	0.0105		375.6451
<b>Total</b>	<b>0.5490</b>	<b>16.8135</b>	<b>3.4745</b>	<b>0.0541</b>	<b>1.5127</b>	<b>0.0626</b>	<b>1.5753</b>	<b>0.4114</b>	<b>0.0599</b>	<b>0.4712</b>		<b>5,710.336 4</b>	<b>5,710.336 4</b>	<b>0.3420</b>		<b>5,718.885 6</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1397	0.0000	9.1397	4.1002	0.0000	4.1002			0.0000			0.0000
Off-Road	3.1629	56.8228	65.3768	0.1160		2.3409	2.3409		2.3160	2.3160	0.0000	11,488.13 26	11,488.13 26	3.6347		11,579.00 07
<b>Total</b>	<b>3.1629</b>	<b>56.8228</b>	<b>65.3768</b>	<b>0.1160</b>	<b>9.1397</b>	<b>2.3409</b>	<b>11.4806</b>	<b>4.1002</b>	<b>2.3160</b>	<b>6.4161</b>	<b>0.0000</b>	<b>11,488.13 26</b>	<b>11,488.13 26</b>	<b>3.6347</b>		<b>11,579.00 07</b>

**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	0.3673	16.7020	2.0085	0.0503	1.1439	0.0604	1.2042	0.3136	0.0578	0.3713		5,334.954 0	5,334.954 0	0.3315		5,343.240 5
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1817	0.1115	1.4660	3.7700e- 003	0.3689	2.2800e- 003	0.3711	0.0978	2.1000e- 003	0.0999		375.3824	375.3824	0.0105		375.6451
<b>Total</b>	<b>0.5490</b>	<b>16.8135</b>	<b>3.4745</b>	<b>0.0541</b>	<b>1.5127</b>	<b>0.0626</b>	<b>1.5753</b>	<b>0.4114</b>	<b>0.0599</b>	<b>0.4712</b>		<b>5,710.336 4</b>	<b>5,710.336 4</b>	<b>0.3420</b>		<b>5,718.885 6</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9618	67.0479	12.5646	0.1550	3.7719	0.5093	4.2812	1.0860	0.4872	1.5732		16,333.1239	16,333.1239	1.3069		16,365.7958
Worker	8.5893	5.2712	69.3038	0.1783	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		17,745.3482	17,745.3482	0.4968		17,757.7681
<b>Total</b>	<b>10.5512</b>	<b>72.3191</b>	<b>81.8685</b>	<b>0.3332</b>	<b>21.2090</b>	<b>0.6169</b>	<b>21.8259</b>	<b>5.7104</b>	<b>0.5864</b>	<b>6.2968</b>		<b>34,078.4721</b>	<b>34,078.4721</b>	<b>1.8037</b>		<b>34,123.5638</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1492	19.4403	19.0928	0.0288		1.2296	1.2296		1.1655	1.1655	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.1492</b>	<b>19.4403</b>	<b>19.0928</b>	<b>0.0288</b>		<b>1.2296</b>	<b>1.2296</b>		<b>1.1655</b>	<b>1.1655</b>	<b>0.0000</b>	<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.9618	67.0479	12.5646	0.1550	3.7719	0.5093	4.2812	1.0860	0.4872	1.5732		16,333.1239	16,333.1239	1.3069		16,365.7958
Worker	8.5893	5.2712	69.3038	0.1783	17.4371	0.1076	17.5448	4.6244	0.0991	4.7236		17,745.3482	17,745.3482	0.4968		17,757.7681
<b>Total</b>	<b>10.5512</b>	<b>72.3191</b>	<b>81.8685</b>	<b>0.3332</b>	<b>21.2090</b>	<b>0.6169</b>	<b>21.8259</b>	<b>5.7104</b>	<b>0.5864</b>	<b>6.2968</b>		<b>34,078.4721</b>	<b>34,078.4721</b>	<b>1.8037</b>		<b>34,123.5638</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

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

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.6417	60.6033	11.0869	0.1539	3.7717	0.3447	4.1164	1.0860	0.3298	1.4157		16,220.5254	16,220.5254	1.2166		16,250.9408
Worker	7.9385	4.6949	62.9015	0.1726	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		17,184.8748	17,184.8748	0.4405		17,195.8871
<b>Total</b>	<b>9.5802</b>	<b>65.2981</b>	<b>73.9885</b>	<b>0.3264</b>	<b>21.2088</b>	<b>0.4503</b>	<b>21.6591</b>	<b>5.7104</b>	<b>0.4270</b>	<b>6.1374</b>		<b>33,405.4002</b>	<b>33,405.4002</b>	<b>1.6571</b>		<b>33,446.8278</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**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	1.9435	17.9990	18.9244	0.0288		1.0765	1.0765		1.0213	1.0213	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>1.9435</b>	<b>17.9990</b>	<b>18.9244</b>	<b>0.0288</b>		<b>1.0765</b>	<b>1.0765</b>		<b>1.0213</b>	<b>1.0213</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.6417	60.6033	11.0869	0.1539	3.7717	0.3447	4.1164	1.0860	0.3298	1.4157		16,220.5254	16,220.5254	1.2166		16,250.9408
Worker	7.9385	4.6949	62.9015	0.1726	17.4371	0.1056	17.5427	4.6244	0.0972	4.7216		17,184.8748	17,184.8748	0.4405		17,195.8871
<b>Total</b>	<b>9.5802</b>	<b>65.2981</b>	<b>73.9885</b>	<b>0.3264</b>	<b>21.2088</b>	<b>0.4503</b>	<b>21.6591</b>	<b>5.7104</b>	<b>0.4270</b>	<b>6.1374</b>		<b>33,405.4002</b>	<b>33,405.4002</b>	<b>1.6571</b>		<b>33,446.8278</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2021**

**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>2.0228</b>	<b>18.7492</b>	<b>17.6706</b>	<b>0.0288</b>		<b>1.0251</b>	<b>1.0251</b>		<b>0.9625</b>	<b>0.9625</b>		<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3751	54.5056	9.7247	0.1526	3.7716	0.1037	3.8753	1.0859	0.0992	1.1851		16,094.4852	16,094.4852	1.1514		16,123.2703
Worker	7.3959	4.2134	57.6750	0.1667	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		16,610.1142	16,610.1142	0.3961		16,620.0156
<b>Total</b>	<b>8.7710</b>	<b>58.7189</b>	<b>67.3998</b>	<b>0.3193</b>	<b>21.2087</b>	<b>0.2064</b>	<b>21.4151</b>	<b>5.7103</b>	<b>0.1938</b>	<b>5.9041</b>		<b>32,704.5994</b>	<b>32,704.5994</b>	<b>1.5475</b>		<b>32,743.2859</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2021**

**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	1.7516	16.6409	18.7597	0.0288		0.9322	0.9322		0.8853	0.8853	0.0000	2,736.0438	2,736.0438	0.6751		2,752.9212
<b>Total</b>	<b>1.7516</b>	<b>16.6409</b>	<b>18.7597</b>	<b>0.0288</b>		<b>0.9322</b>	<b>0.9322</b>		<b>0.8853</b>	<b>0.8853</b>	<b>0.0000</b>	<b>2,736.0438</b>	<b>2,736.0438</b>	<b>0.6751</b>		<b>2,752.9212</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3751	54.5056	9.7247	0.1526	3.7716	0.1037	3.8753	1.0859	0.0992	1.1851		16,094.4852	16,094.4852	1.1514		16,123.2703
Worker	7.3959	4.2134	57.6750	0.1667	17.4371	0.1028	17.5399	4.6244	0.0946	4.7190		16,610.1142	16,610.1142	0.3961		16,620.0156
<b>Total</b>	<b>8.7710</b>	<b>58.7189</b>	<b>67.3998</b>	<b>0.3193</b>	<b>21.2087</b>	<b>0.2064</b>	<b>21.4151</b>	<b>5.7103</b>	<b>0.1938</b>	<b>5.9041</b>		<b>32,704.5994</b>	<b>32,704.5994</b>	<b>1.5475</b>		<b>32,743.2859</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.8146</b>	<b>16.7670</b>	<b>17.4392</b>	<b>0.0288</b>		<b>0.8645</b>	<b>0.8645</b>		<b>0.8122</b>	<b>0.8122</b>		<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2822	51.4244	9.0451	0.1513	3.7714	0.0872	3.8586	1.0859	0.0834	1.1692		15,957.4930	15,957.4930	1.0905		15,984.7545
Worker	6.9179	3.7918	53.1976	0.1606	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		16,003.1982	16,003.1982	0.3558		16,012.0921
<b>Total</b>	<b>8.2001</b>	<b>55.2162</b>	<b>62.2427</b>	<b>0.3119</b>	<b>21.2085</b>	<b>0.1872</b>	<b>21.3958</b>	<b>5.7103</b>	<b>0.1755</b>	<b>5.8857</b>		<b>31,960.6912</b>	<b>31,960.6912</b>	<b>1.4462</b>		<b>31,996.8466</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5834	15.3239	18.6187	0.0288		0.7948	0.7948		0.7564	0.7564	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
<b>Total</b>	<b>1.5834</b>	<b>15.3239</b>	<b>18.6187</b>	<b>0.0288</b>		<b>0.7948</b>	<b>0.7948</b>		<b>0.7564</b>	<b>0.7564</b>	<b>0.0000</b>	<b>2,737.1520</b>	<b>2,737.1520</b>	<b>0.6711</b>		<b>2,753.9288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2822	51.4244	9.0451	0.1513	3.7714	0.0872	3.8586	1.0859	0.0834	1.1692		15,957.4930	15,957.4930	1.0905		15,984.7545
Worker	6.9179	3.7918	53.1976	0.1606	17.4371	0.1000	17.5372	4.6244	0.0921	4.7165		16,003.1982	16,003.1982	0.3558		16,012.0921
<b>Total</b>	<b>8.2001</b>	<b>55.2162</b>	<b>62.2427</b>	<b>0.3119</b>	<b>21.2085</b>	<b>0.1872</b>	<b>21.3958</b>	<b>5.7103</b>	<b>0.1755</b>	<b>5.8857</b>		<b>31,960.6912</b>	<b>31,960.6912</b>	<b>1.4462</b>		<b>31,996.8466</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.6735</b>	<b>15.4377</b>	<b>17.3101</b>	<b>0.0288</b>		<b>0.7481</b>	<b>0.7481</b>		<b>0.7029</b>	<b>0.7029</b>		<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9834	38.6690	7.9725	0.1472	3.7713	0.0389	3.8102	1.0858	0.0372	1.1230		15,533.0813	15,533.0813	0.8368		15,554.0000
Worker	6.4863	3.4194	49.0950	0.1545	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		15,395.0349	15,395.0349	0.3193		15,403.0178
<b>Total</b>	<b>7.4697</b>	<b>42.0883</b>	<b>57.0675</b>	<b>0.3016</b>	<b>21.2084</b>	<b>0.1366</b>	<b>21.3450</b>	<b>5.7102</b>	<b>0.1271</b>	<b>5.8373</b>		<b>30,928.1162</b>	<b>30,928.1162</b>	<b>1.1561</b>		<b>30,957.0179</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4638	14.3633	18.5475	0.0288		0.6927	0.6927		0.6603	0.6603	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
<b>Total</b>	<b>1.4638</b>	<b>14.3633</b>	<b>18.5475</b>	<b>0.0288</b>		<b>0.6927</b>	<b>0.6927</b>		<b>0.6603</b>	<b>0.6603</b>	<b>0.0000</b>	<b>2,738.1535</b>	<b>2,738.1535</b>	<b>0.6670</b>		<b>2,754.8288</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9834	38.6690	7.9725	0.1472	3.7713	0.0389	3.8102	1.0858	0.0372	1.1230		15,533.0813	15,533.0813	0.8368		15,554.0000
Worker	6.4863	3.4194	49.0950	0.1545	17.4371	0.0977	17.5348	4.6244	0.0899	4.7143		15,395.0349	15,395.0349	0.3193		15,403.0178
<b>Total</b>	<b>7.4697</b>	<b>42.0883</b>	<b>57.0675</b>	<b>0.3016</b>	<b>21.2084</b>	<b>0.1366</b>	<b>21.3450</b>	<b>5.7102</b>	<b>0.1271</b>	<b>5.8373</b>		<b>30,928.1162</b>	<b>30,928.1162</b>	<b>1.1561</b>		<b>30,957.0179</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2973	0.6839	9.8190	0.0309	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		3,079.0070	3,079.0070	0.0639		3,080.6036
<b>Total</b>	<b>1.2973</b>	<b>0.6839</b>	<b>9.8190</b>	<b>0.0309</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>3,079.0070</b>	<b>3,079.0070</b>	<b>0.0639</b>		<b>3,080.6036</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
<b>Total</b>	<b>20.1007</b>	<b>1.7373</b>	<b>2.4148</b>	<b>3.9600e-003</b>		<b>0.0944</b>	<b>0.0944</b>		<b>0.0944</b>	<b>0.0944</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0225</b>		<b>375.8253</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2973	0.6839	9.8190	0.0309	3.4874	0.0195	3.5070	0.9249	0.0180	0.9429		3,079.0070	3,079.0070	0.0639		3,080.6036
<b>Total</b>	<b>1.2973</b>	<b>0.6839</b>	<b>9.8190</b>	<b>0.0309</b>	<b>3.4874</b>	<b>0.0195</b>	<b>3.5070</b>	<b>0.9249</b>	<b>0.0180</b>	<b>0.9429</b>		<b>3,079.0070</b>	<b>3,079.0070</b>	<b>0.0639</b>		<b>3,080.6036</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812		375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2226	0.6202	9.2067	0.0298	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,969.090 2	2,969.090 2	0.0582		2,970.546 1
<b>Total</b>	<b>1.2226</b>	<b>0.6202</b>	<b>9.2067</b>	<b>0.0298</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,969.090 2</b>	<b>2,969.090 2</b>	<b>0.0582</b>		<b>2,970.546 1</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Architectural Coating - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.8451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2410	1.6251	2.4135	3.9600e-003		0.0812	0.0812		0.0812	0.0812	0.0000	375.2641	375.2641	0.0211		375.7923
<b>Total</b>	<b>20.0862</b>	<b>1.6251</b>	<b>2.4135</b>	<b>3.9600e-003</b>		<b>0.0812</b>	<b>0.0812</b>		<b>0.0812</b>	<b>0.0812</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0211</b>		<b>375.7923</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2226	0.6202	9.2067	0.0298	3.4874	0.0193	3.5068	0.9249	0.0178	0.9427		2,969.090 2	2,969.090 2	0.0582		2,970.546 1
<b>Total</b>	<b>1.2226</b>	<b>0.6202</b>	<b>9.2067</b>	<b>0.0298</b>	<b>3.4874</b>	<b>0.0193</b>	<b>3.5068</b>	<b>0.9249</b>	<b>0.0178</b>	<b>0.9427</b>		<b>2,969.090 2</b>	<b>2,969.090 2</b>	<b>0.0582</b>		<b>2,970.546 1</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		148.0292	148.0292	3.0700e-003		148.1059
<b>Total</b>	<b>0.0624</b>	<b>0.0329</b>	<b>0.4721</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>148.0292</b>	<b>148.0292</b>	<b>3.0700e-003</b>		<b>148.1059</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2023**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9107</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0329	0.4721	1.4900e-003	0.1677	9.4000e-004	0.1686	0.0445	8.6000e-004	0.0453		148.0292	148.0292	3.0700e-003		148.1059
<b>Total</b>	<b>0.0624</b>	<b>0.0329</b>	<b>0.4721</b>	<b>1.4900e-003</b>	<b>0.1677</b>	<b>9.4000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>148.0292</b>	<b>148.0292</b>	<b>3.0700e-003</b>		<b>148.1059</b>



Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
<b>Total</b>	<b>0.0588</b>	<b>0.0298</b>	<b>0.4426</b>	<b>1.4300e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>142.7447</b>	<b>142.7447</b>	<b>2.8000e-003</b>		<b>142.8147</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Paving - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.8779					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8661</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>	<b>0.0000</b>	<b>2,207.547 2</b>	<b>2,207.547 2</b>	<b>0.7140</b>		<b>2,225.396 3</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
<b>Total</b>	<b>0.0588</b>	<b>0.0298</b>	<b>0.4426</b>	<b>1.4300e-003</b>	<b>0.1677</b>	<b>9.3000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.6000e-004</b>	<b>0.0453</b>		<b>142.7447</b>	<b>142.7447</b>	<b>2.8000e-003</b>		<b>142.8147</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612
Unmitigated	31.3283	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688	0.0000	87.3649	87.3649	0.0839	0.0000	89.4612

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>31.3283</b>	<b>0.5588</b>	<b>48.4979</b>	<b>2.5600e-003</b>		<b>0.2688</b>	<b>0.2688</b>		<b>0.2688</b>	<b>0.2688</b>	<b>0.0000</b>	<b>87.3649</b>	<b>87.3649</b>	<b>0.0839</b>	<b>0.0000</b>	<b>89.4612</b>

**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**

Rancho Diamante Phase 1 (Construction - Mitigated) - Riverside-South Coast County, Summer

**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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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 2 (Construction - Mitigated)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Architectural Coating activities to be conducted simultaneous with Paving activities.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

Off-road Equipment -

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

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

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

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseStartDate	1/29/2026	1/1/2026
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	1.92	0.00
tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	105.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	0.00

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	0.00
tblWater	OutdoorWaterUseRate	4,539,928.74	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	6.6111	66.2471	48.3574	0.1189	23.7376	2.7229	26.4605	10.6011	2.5051	13.1061	0.0000	11,524.1263	11,524.1263	3.6414	0.0000	11,615.1612
2025	1.6008	14.4454	18.0752	0.0353	0.4601	0.5677	1.0278	0.1244	0.5332	0.6576	0.0000	3,404.1152	3,404.1152	0.6889	0.0000	3,421.3379
2026	12.8040	10.1449	17.4201	0.0284	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,747.8380	2,747.8380	0.7370	0.0000	2,766.2631
<b>Maximum</b>	<b>12.8040</b>	<b>66.2471</b>	<b>48.3574</b>	<b>0.1189</b>	<b>23.7376</b>	<b>2.7229</b>	<b>26.4605</b>	<b>10.6011</b>	<b>2.5051</b>	<b>13.1061</b>	<b>0.0000</b>	<b>11,524.1263</b>	<b>11,524.1263</b>	<b>3.6414</b>	<b>0.0000</b>	<b>11,615.1612</b>

**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					
2024	3.1132	55.1123	66.0246	0.1189	9.4827	2.1638	11.6465	4.1941	2.1530	6.3471	0.0000	11,524.1263	11,524.1263	3.6414	0.0000	11,615.1612
2025	1.4297	14.0185	19.4106	0.0353	0.4601	0.5370	0.9971	0.1244	0.5133	0.6377	0.0000	3,404.1152	3,404.1152	0.6889	0.0000	3,421.3379
2026	12.8040	10.1449	17.4201	0.0284	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,747.8380	2,747.8380	0.7370	0.0000	2,766.2631
<b>Maximum</b>	<b>12.8040</b>	<b>55.1123</b>	<b>66.0246</b>	<b>0.1189</b>	<b>9.4827</b>	<b>2.1638</b>	<b>11.6465</b>	<b>4.1941</b>	<b>2.1530</b>	<b>6.3471</b>	<b>0.0000</b>	<b>11,524.1263</b>	<b>11,524.1263</b>	<b>3.6414</b>	<b>0.0000</b>	<b>11,615.1612</b>

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	17.46	12.73	-22.66	0.00	58.34	15.61	52.62	59.39	10.65	47.47	0.00	0.00	0.00	0.00	0.00	0.00

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	11/6/2024	5	30	
2	Building Construction	Building Construction	11/7/2024	12/31/2025	5	300	
3	Paving	Paving	1/1/2026	1/28/2026	5	20	
4	Architectural Coating	Architectural Coating	1/1/2026	2/25/2026	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	16.00	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	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.3688	0.0000	23.3688	10.5032	0.0000	10.5032			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032		11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>23.3688</b>	<b>2.7208</b>	<b>26.0896</b>	<b>10.5032</b>	<b>2.5032</b>	<b>13.0064</b>		<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
<b>Total</b>	<b>0.1281</b>	<b>0.0677</b>	<b>0.7819</b>	<b>2.8200e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>281.7122</b>	<b>281.7122</b>	<b>5.3700e-003</b>		<b>281.8465</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1138	0.0000	9.1138	4.0963	0.0000	4.0963			0.0000			0.0000
Off-Road	2.9852	55.0446	65.2427	0.1161		2.1618	2.1618		2.1512	2.1512	0.0000	11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>2.9852</b>	<b>55.0446</b>	<b>65.2427</b>	<b>0.1161</b>	<b>9.1138</b>	<b>2.1618</b>	<b>11.2756</b>	<b>4.0963</b>	<b>2.1512</b>	<b>6.2474</b>	<b>0.0000</b>	<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
<b>Total</b>	<b>0.1281</b>	<b>0.0677</b>	<b>0.7819</b>	<b>2.8200e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>281.7122</b>	<b>281.7122</b>	<b>5.3700e-003</b>		<b>281.8465</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166		2,738.7124	2,738.7124	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>		<b>2,738.7124</b>	<b>2,738.7124</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	1.0306	0.2421	3.8300e-003	0.1024	1.0800e-003	0.1035	0.0295	1.0400e-003	0.0305		404.8021	404.8021	0.0246		405.4182
Worker	0.1242	0.0657	0.7583	2.7400e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		273.1755	273.1755	5.2100e-003		273.3057
<b>Total</b>	<b>0.1520</b>	<b>1.0963</b>	<b>1.0003</b>	<b>6.5700e-003</b>	<b>0.4601</b>	<b>3.0600e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8600e-003</b>	<b>0.1272</b>		<b>677.9776</b>	<b>677.9776</b>	<b>0.0299</b>		<b>678.7239</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3770	13.6617	18.5242	0.0288		0.6146	0.6146		0.5864	0.5864	0.0000	2,738.7123	2,738.7123	0.6635		2,755.3009
<b>Total</b>	<b>1.3770</b>	<b>13.6617</b>	<b>18.5242</b>	<b>0.0288</b>		<b>0.6146</b>	<b>0.6146</b>		<b>0.5864</b>	<b>0.5864</b>	<b>0.0000</b>	<b>2,738.7123</b>	<b>2,738.7123</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0278	1.0306	0.2421	3.8300e-003	0.1024	1.0800e-003	0.1035	0.0295	1.0400e-003	0.0305		404.8021	404.8021	0.0246		405.4182
Worker	0.1242	0.0657	0.7583	2.7400e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		273.1755	273.1755	5.2100e-003		273.3057
<b>Total</b>	<b>0.1520</b>	<b>1.0963</b>	<b>1.0003</b>	<b>6.5700e-003</b>	<b>0.4601</b>	<b>3.0600e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8600e-003</b>	<b>0.1272</b>		<b>677.9776</b>	<b>677.9776</b>	<b>0.0299</b>		<b>678.7239</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304		2,739.5986	2,739.5986	0.6602		2,756.1030
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>		<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1030</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	1.0192	0.2344	3.8100e-003	0.1024	1.0700e-003	0.1035	0.0295	1.0200e-003	0.0305		402.2726	402.2726	0.0240		402.8728
Worker	0.1177	0.0598	0.7030	2.6300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		262.2440	262.2440	4.7200e-003		262.3621
<b>Total</b>	<b>0.1447</b>	<b>1.0790</b>	<b>0.9373</b>	<b>6.4400e-003</b>	<b>0.4601</b>	<b>3.0200e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.8100e-003</b>	<b>0.1272</b>		<b>664.5166</b>	<b>664.5166</b>	<b>0.0287</b>		<b>665.2349</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.3 Building Construction - 2025**

**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	1.2850	12.9395	18.4733	0.0289		0.5340	0.5340		0.5105	0.5105	0.0000	2,739.5986	2,739.5986	0.6602		2,756.1029
<b>Total</b>	<b>1.2850</b>	<b>12.9395</b>	<b>18.4733</b>	<b>0.0289</b>		<b>0.5340</b>	<b>0.5340</b>		<b>0.5105</b>	<b>0.5105</b>	<b>0.0000</b>	<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1029</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0271	1.0192	0.2344	3.8100e-003	0.1024	1.0700e-003	0.1035	0.0295	1.0200e-003	0.0305		402.2726	402.2726	0.0240		402.8728
Worker	0.1177	0.0598	0.7030	2.6300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		262.2440	262.2440	4.7200e-003		262.3621
<b>Total</b>	<b>0.1447</b>	<b>1.0790</b>	<b>0.9373</b>	<b>6.4400e-003</b>	<b>0.4601</b>	<b>3.0200e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.8100e-003</b>	<b>0.1272</b>		<b>664.5166</b>	<b>664.5166</b>	<b>0.0287</b>		<b>665.2349</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Paving - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
<b>Total</b>	<b>0.0525</b>	<b>0.0257</b>	<b>0.3071</b>	<b>1.1900e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>118.4491</b>	<b>118.4491</b>	<b>2.0200e-003</b>		<b>118.4996</b>



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.4 Paving - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.7452</b>	<b>2,206.7452</b>	<b>0.7137</b>		<b>2,224.5878</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
<b>Total</b>	<b>0.0525</b>	<b>0.0257</b>	<b>0.3071</b>	<b>1.1900e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>118.4491</b>	<b>118.4491</b>	<b>2.0200e-003</b>		<b>118.4996</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0103	0.1228	4.7000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		47.3797	47.3797	8.1000e-004		47.3998
<b>Total</b>	<b>0.0210</b>	<b>0.0103</b>	<b>0.1228</b>	<b>4.7000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>47.3797</b>	<b>47.3797</b>	<b>8.1000e-004</b>		<b>47.3998</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0210	0.0103	0.1228	4.7000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		47.3797	47.3797	8.1000e-004		47.3998
<b>Total</b>	<b>0.0210</b>	<b>0.0103</b>	<b>0.1228</b>	<b>4.7000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>47.3797</b>	<b>47.3797</b>	<b>8.1000e-004</b>		<b>47.3998</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</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					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005			0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>			<b>0.0233</b>

**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**



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Winter

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 2 (Construction - Mitigated)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Architectural Coating activities to be conducted simultaneous with Paving activities.

Off-road Equipment - Equipment list adjusted based on past Project experience.

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

Off-road Equipment -

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

Architectural Coating - Rule 1113

Vehicle Trips - Construction Run Only.

Energy Use - Construction Run Only.

Water And Wastewater - Construction Run Only.

Solid Waste - Construction Run Only.

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

Grading -

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseStartDate	1/29/2026	1/1/2026
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	1.92	0.00
tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	105.00	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	64.70	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	0.00

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.70	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	0.00
tblWater	OutdoorWaterUseRate	4,539,928.74	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	6.6123	66.2450	48.5492	0.1193	23.7376	2.7229	26.4605	10.6011	2.5051	13.1061	0.0000	11,556.45 25	11,556.45 25	3.6422	0.0000	11,647.50 71
2025	1.6001	14.4577	18.2161	0.0357	0.4601	0.5677	1.0278	0.1244	0.5332	0.6575	0.0000	3,449.482 5	3,449.482 5	0.6873	0.0000	3,466.664 0
2026	12.8043	10.1438	17.5266	0.0286	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,766.852 5	2,766.852 5	0.7374	0.0000	2,785.287 9
<b>Maximum</b>	<b>12.8043</b>	<b>66.2450</b>	<b>48.5492</b>	<b>0.1193</b>	<b>23.7376</b>	<b>2.7229</b>	<b>26.4605</b>	<b>10.6011</b>	<b>2.5051</b>	<b>13.1061</b>	<b>0.0000</b>	<b>11,556.45 25</b>	<b>11,556.45 25</b>	<b>3.6422</b>	<b>0.0000</b>	<b>11,647.50 71</b>

**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					
2024	3.1145	55.1102	66.2165	0.1193	9.4827	2.1638	11.6465	4.1941	2.1530	6.3471	0.0000	11,556.45 25	11,556.45 25	3.6422	0.0000	11,647.50 71
2025	1.4290	14.0309	19.5516	0.0357	0.4601	0.5370	0.9971	0.1244	0.5133	0.6376	0.0000	3,449.482 5	3,449.482 5	0.6873	0.0000	3,466.664 0
2026	12.8043	10.1438	17.5266	0.0286	0.2347	0.4884	0.7232	0.0623	0.4549	0.5171	0.0000	2,766.852 5	2,766.852 5	0.7374	0.0000	2,785.287 9
<b>Maximum</b>	<b>12.8043</b>	<b>55.1102</b>	<b>66.2165</b>	<b>0.1193</b>	<b>9.4827</b>	<b>2.1638</b>	<b>11.6465</b>	<b>4.1941</b>	<b>2.1530</b>	<b>6.3471</b>	<b>0.0000</b>	<b>11,556.45 25</b>	<b>11,556.45 25</b>	<b>3.6422</b>	<b>0.0000</b>	<b>11,647.50 71</b>

## Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	17.46	12.73	-22.54	0.00	58.34	15.61	52.62	59.39	10.65	47.47	0.00	0.00	0.00	0.00	0.00	0.00

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0233</b>



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	11/6/2024	5	30	
2	Building Construction	Building Construction	11/7/2024	12/31/2025	5	300	
3	Paving	Paving	1/1/2026	1/28/2026	5	20	
4	Architectural Coating	Architectural Coating	1/1/2026	2/25/2026	5	40	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 150**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 150,000; Non-Residential Outdoor: 50,000; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48
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	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	13	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	32.00	16.00	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	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					23.3688	0.0000	23.3688	10.5032	0.0000	10.5032			0.0000			0.0000
Off-Road	6.4830	66.1794	47.5754	0.1161		2.7208	2.7208		2.5032	2.5032		11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>6.4830</b>	<b>66.1794</b>	<b>47.5754</b>	<b>0.1161</b>	<b>23.3688</b>	<b>2.7208</b>	<b>26.0896</b>	<b>10.5032</b>	<b>2.5032</b>	<b>13.0064</b>		<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
<b>Total</b>	<b>0.1293</b>	<b>0.0656</b>	<b>0.9738</b>	<b>3.1500e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>314.0384</b>	<b>314.0384</b>	<b>6.1600e-003</b>		<b>314.1924</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.1138	0.0000	9.1138	4.0963	0.0000	4.0963			0.0000			0.0000
Off-Road	2.9852	55.0446	65.2427	0.1161		2.1618	2.1618		2.1512	2.1512	0.0000	11,242.41 41	11,242.41 41	3.6360		11,333.31 47
<b>Total</b>	<b>2.9852</b>	<b>55.0446</b>	<b>65.2427</b>	<b>0.1161</b>	<b>9.1138</b>	<b>2.1618</b>	<b>11.2756</b>	<b>4.0963</b>	<b>2.1512</b>	<b>6.2474</b>	<b>0.0000</b>	<b>11,242.41 41</b>	<b>11,242.41 41</b>	<b>3.6360</b>		<b>11,333.31 47</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
<b>Total</b>	<b>0.1293</b>	<b>0.0656</b>	<b>0.9738</b>	<b>3.1500e-003</b>	<b>0.3689</b>	<b>2.0400e-003</b>	<b>0.3709</b>	<b>0.0978</b>	<b>1.8800e-003</b>	<b>0.0997</b>		<b>314.0384</b>	<b>314.0384</b>	<b>6.1600e-003</b>		<b>314.1924</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5670	14.4249	17.2270	0.0288		0.6565	0.6565		0.6166	0.6166		2,738.7124	2,738.7124	0.6635		2,755.3009
<b>Total</b>	<b>1.5670</b>	<b>14.4249</b>	<b>17.2270</b>	<b>0.0288</b>		<b>0.6565</b>	<b>0.6565</b>		<b>0.6166</b>	<b>0.6166</b>		<b>2,738.7124</b>	<b>2,738.7124</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	1.0447	0.2092	3.9800e-003	0.1024	1.0500e-003	0.1035	0.0295	1.0100e-003	0.0305		420.3005	420.3005	0.0222		420.8565
Worker	0.1254	0.0636	0.9443	3.0500e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		304.5221	304.5221	5.9700e-003		304.6714
<b>Total</b>	<b>0.1516</b>	<b>1.1083</b>	<b>1.1535</b>	<b>7.0300e-003</b>	<b>0.4601</b>	<b>3.0300e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8300e-003</b>	<b>0.1272</b>		<b>724.8226</b>	<b>724.8226</b>	<b>0.0282</b>		<b>725.5278</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3770	13.6617	18.5242	0.0288		0.6146	0.6146		0.5864	0.5864	0.0000	2,738.7123	2,738.7123	0.6635		2,755.3009
<b>Total</b>	<b>1.3770</b>	<b>13.6617</b>	<b>18.5242</b>	<b>0.0288</b>		<b>0.6146</b>	<b>0.6146</b>		<b>0.5864</b>	<b>0.5864</b>	<b>0.0000</b>	<b>2,738.7123</b>	<b>2,738.7123</b>	<b>0.6635</b>		<b>2,755.3009</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0262	1.0447	0.2092	3.9800e-003	0.1024	1.0500e-003	0.1035	0.0295	1.0100e-003	0.0305		420.3005	420.3005	0.0222		420.8565
Worker	0.1254	0.0636	0.9443	3.0500e-003	0.3577	1.9800e-003	0.3597	0.0949	1.8200e-003	0.0967		304.5221	304.5221	5.9700e-003		304.6714
<b>Total</b>	<b>0.1516</b>	<b>1.1083</b>	<b>1.1535</b>	<b>7.0300e-003</b>	<b>0.4601</b>	<b>3.0300e-003</b>	<b>0.4632</b>	<b>0.1244</b>	<b>2.8300e-003</b>	<b>0.1272</b>		<b>724.8226</b>	<b>724.8226</b>	<b>0.0282</b>		<b>725.5278</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2025**

**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	1.4560	13.3663	17.1378	0.0289		0.5647	0.5647		0.5304	0.5304		2,739.5986	2,739.5986	0.6602		2,756.1030
<b>Total</b>	<b>1.4560</b>	<b>13.3663</b>	<b>17.1378</b>	<b>0.0289</b>		<b>0.5647</b>	<b>0.5647</b>		<b>0.5304</b>	<b>0.5304</b>		<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1030</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0255	1.0335	0.2021	3.9500e-003	0.1024	1.0400e-003	0.1035	0.0295	9.9000e-004	0.0305		417.5658	417.5658	0.0217		418.1076
Worker	0.1185	0.0579	0.8762	2.9300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		292.3181	292.3181	5.4100e-003		292.4535
<b>Total</b>	<b>0.1440</b>	<b>1.0914</b>	<b>1.0783</b>	<b>6.8800e-003</b>	<b>0.4601</b>	<b>2.9900e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.7800e-003</b>	<b>0.1271</b>		<b>709.8839</b>	<b>709.8839</b>	<b>0.0271</b>		<b>710.5610</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.3 Building Construction - 2025**

**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	1.2850	12.9395	18.4733	0.0289		0.5340	0.5340		0.5105	0.5105	0.0000	2,739.5986	2,739.5986	0.6602		2,756.1029
<b>Total</b>	<b>1.2850</b>	<b>12.9395</b>	<b>18.4733</b>	<b>0.0289</b>		<b>0.5340</b>	<b>0.5340</b>		<b>0.5105</b>	<b>0.5105</b>	<b>0.0000</b>	<b>2,739.5986</b>	<b>2,739.5986</b>	<b>0.6602</b>		<b>2,756.1029</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0255	1.0335	0.2021	3.9500e-003	0.1024	1.0400e-003	0.1035	0.0295	9.9000e-004	0.0305		417.5658	417.5658	0.0217		418.1076
Worker	0.1185	0.0579	0.8762	2.9300e-003	0.3577	1.9500e-003	0.3596	0.0949	1.7900e-003	0.0967		292.3181	292.3181	5.4100e-003		292.4535
<b>Total</b>	<b>0.1440</b>	<b>1.0914</b>	<b>1.0783</b>	<b>6.8800e-003</b>	<b>0.4601</b>	<b>2.9900e-003</b>	<b>0.4631</b>	<b>0.1244</b>	<b>2.7800e-003</b>	<b>0.1271</b>		<b>709.8839</b>	<b>709.8839</b>	<b>0.0271</b>		<b>710.5610</b>



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Paving - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>		<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
<b>Total</b>	<b>0.0527</b>	<b>0.0249</b>	<b>0.3832</b>	<b>1.3200e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>132.0309</b>	<b>132.0309</b>	<b>2.3100e-003</b>		<b>132.0888</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.4 Paving - 2026**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9152</b>	<b>8.5816</b>	<b>14.5780</b>	<b>0.0228</b>		<b>0.4185</b>	<b>0.4185</b>		<b>0.3850</b>	<b>0.3850</b>	<b>0.0000</b>	<b>2,206.745 2</b>	<b>2,206.745 2</b>	<b>0.7137</b>		<b>2,224.587 8</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
<b>Total</b>	<b>0.0527</b>	<b>0.0249</b>	<b>0.3832</b>	<b>1.3200e-003</b>	<b>0.1677</b>	<b>8.8000e-004</b>	<b>0.1686</b>	<b>0.0445</b>	<b>8.1000e-004</b>	<b>0.0453</b>		<b>132.0309</b>	<b>132.0309</b>	<b>2.3100e-003</b>		<b>132.0888</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	9.9500e-003	0.1533	5.3000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		52.8124	52.8124	9.3000e-004		52.8355
<b>Total</b>	<b>0.0211</b>	<b>9.9500e-003</b>	<b>0.1533</b>	<b>5.3000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>52.8124</b>	<b>52.8124</b>	<b>9.3000e-004</b>		<b>52.8355</b>

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2026**

**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	11.5875					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
<b>Total</b>	<b>11.8153</b>	<b>1.5273</b>	<b>2.4122</b>	<b>3.9600e-003</b>		<b>0.0687</b>	<b>0.0687</b>		<b>0.0687</b>	<b>0.0687</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0205</b>		<b>375.7758</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	9.9500e-003	0.1533	5.3000e-004	0.0671	3.5000e-004	0.0674	0.0178	3.3000e-004	0.0181		52.8124	52.8124	9.3000e-004		52.8355
<b>Total</b>	<b>0.0211</b>	<b>9.9500e-003</b>	<b>0.1533</b>	<b>5.3000e-004</b>	<b>0.0671</b>	<b>3.5000e-004</b>	<b>0.0674</b>	<b>0.0178</b>	<b>3.3000e-004</b>	<b>0.0181</b>		<b>52.8124</b>	<b>52.8124</b>	<b>9.3000e-004</b>		<b>52.8355</b>

**4.0 Operational Detail - Mobile**

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Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas 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					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Natural Gas 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					
Regional Shopping Center	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>



Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**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**

Rancho Diamante Phase 2 (Construction - Mitigated) - Riverside-South Coast County, Summer

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

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

Equipment Type	Number
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**11.0 Vegetation**

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**APPENDIX 3.3:**

**CALEEMOD OPERATIONS (PHASE 1) EMISSIONS MODEL OUTPUTS**

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 1 (Operations)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Grading -

Vehicle Trips - Trip Rates based on ITE 10th Edition (2017)

Woodstoves - Gas Stoves and Fireplaces Only.

## Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	310.00	1.00
tblConstructionPhase	PhaseEndDate	10/29/2021	6/3/2019
tblConstructionPhase	PhaseStartDate	8/22/2020	6/3/2019
tblFireplaces	NumberGas	499.80	588.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	AcresOfGrading	0.00	2.50
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205
Energy	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
Mobile	7.5968	54.9811	94.6535	0.4756	40.8665	0.2805	41.1470	10.9315	0.2614	11.1929		48,674.5741	48,674.5741	2.1537		48,728.4161
<b>Total</b>	<b>40.5980</b>	<b>69.8361</b>	<b>149.2348</b>	<b>0.5694</b>	<b>40.8665</b>	<b>1.7052</b>	<b>42.5717</b>	<b>10.9315</b>	<b>1.6860</b>	<b>12.6175</b>	<b>0.0000</b>	<b>67,012.4261</b>	<b>67,012.4261</b>	<b>2.5873</b>	<b>0.3346</b>	<b>67,176.8179</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	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205
Energy	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
Mobile	7.5968	54.9811	94.6535	0.4756	40.8665	0.2805	41.1470	10.9315	0.2614	11.1929		48,674.5741	48,674.5741	2.1537		48,728.4161
<b>Total</b>	<b>40.5980</b>	<b>69.8361</b>	<b>149.2348</b>	<b>0.5694</b>	<b>40.8665</b>	<b>1.7052</b>	<b>42.5717</b>	<b>10.9315</b>	<b>1.6860</b>	<b>12.6175</b>	<b>0.0000</b>	<b>67,012.4261</b>	<b>67,012.4261</b>	<b>2.5873</b>	<b>0.3346</b>	<b>67,176.8179</b>



Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	6/3/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 73.72

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Scrapers	0	8.00	367	0.48

#### Trips and VMT

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	0	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1076	0.0700	0.7201	2.0500e-003	0.2236	1.3800e-003	0.2249	0.0593	1.2700e-003	0.0606		204.1034	204.1034	5.5400e-003		204.2419
<b>Total</b>	<b>0.1076</b>	<b>0.0700</b>	<b>0.7201</b>	<b>2.0500e-003</b>	<b>0.2236</b>	<b>1.3800e-003</b>	<b>0.2249</b>	<b>0.0593</b>	<b>1.2700e-003</b>	<b>0.0606</b>		<b>204.1034</b>	<b>204.1034</b>	<b>5.5400e-003</b>		<b>204.2419</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					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1076	0.0700	0.7201	2.0500e-003	0.2236	1.3800e-003	0.2249	0.0593	1.2700e-003	0.0606		204.1034	204.1034	5.5400e-003		204.2419
<b>Total</b>	<b>0.1076</b>	<b>0.0700</b>	<b>0.7201</b>	<b>2.0500e-003</b>	<b>0.2236</b>	<b>1.3800e-003</b>	<b>0.2249</b>	<b>0.0593</b>	<b>1.2700e-003</b>	<b>0.0606</b>		<b>204.1034</b>	<b>204.1034</b>	<b>5.5400e-003</b>		<b>204.2419</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.5968	54.9811	94.6535	0.4756	40.8665	0.2805	41.1470	10.9315	0.2614	11.1929		48,674.57 41	48,674.57 41	2.1537		48,728.41 61
Unmitigated	7.5968	54.9811	94.6535	0.4756	40.8665	0.2805	41.1470	10.9315	0.2614	11.1929		48,674.57 41	48,674.57 41	2.1537		48,728.41 61

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	5,550.72	5,609.52	5027.40	18,740,891	18,740,891
Total	5,550.72	5,609.52	5,027.40	18,740,891	18,740,891

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, 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	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
NaturalGas Unmitigated	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	49289.1	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
<b>Total</b>		<b>0.5316</b>	<b>4.5423</b>	<b>1.9329</b>	<b>0.0290</b>		<b>0.3673</b>	<b>0.3673</b>		<b>0.3673</b>	<b>0.3673</b>		<b>5,798.7224</b>	<b>5,798.7224</b>	<b>0.1111</b>	<b>0.1063</b>	<b>5,833.1813</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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	49.2891	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
<b>Total</b>		<b>0.5316</b>	<b>4.5423</b>	<b>1.9329</b>	<b>0.0290</b>		<b>0.3673</b>	<b>0.3673</b>		<b>0.3673</b>	<b>0.3673</b>		<b>5,798.7224</b>	<b>5,798.7224</b>	<b>0.1111</b>	<b>0.1063</b>	<b>5,833.1813</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205
Unmitigated	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.1414	9.7539	4.1506	0.0623		0.7886	0.7886		0.7886	0.7886	0.0000	12,451.7647	12,451.7647	0.2387	0.2283	12,525.7593
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>32.4697</b>	<b>10.3126</b>	<b>52.6485</b>	<b>0.0648</b>		<b>1.0574</b>	<b>1.0574</b>		<b>1.0574</b>	<b>1.0574</b>	<b>0.0000</b>	<b>12,539.1296</b>	<b>12,539.1296</b>	<b>0.3225</b>	<b>0.2283</b>	<b>12,615.2205</b>



Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.1414	9.7539	4.1506	0.0623		0.7886	0.7886		0.7886	0.7886	0.0000	12,451.76 47	12,451.76 47	0.2387	0.2283	12,525.75 93
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>32.4697</b>	<b>10.3126</b>	<b>52.6485</b>	<b>0.0648</b>		<b>1.0574</b>	<b>1.0574</b>		<b>1.0574</b>	<b>1.0574</b>	<b>0.0000</b>	<b>12,539.12 96</b>	<b>12,539.12 96</b>	<b>0.3225</b>	<b>0.2283</b>	<b>12,615.22 05</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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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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Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Winter

**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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Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 1 (Operations)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	588.00	Dwelling Unit	86.55	1,324,117.20	1682
Other Asphalt Surfaces	73.72	Acre	73.72	3,211,243.20	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Grading -

Vehicle Trips - Trip Rates based on ITE 10th Edition (2017)

Woodstoves - Gas Stoves and Fireplaces Only.

## Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	310.00	1.00
tblConstructionPhase	PhaseEndDate	10/29/2021	6/3/2019
tblConstructionPhase	PhaseStartDate	8/22/2020	6/3/2019
tblFireplaces	NumberGas	499.80	588.00
tblFireplaces	NumberNoFireplace	58.80	0.00
tblFireplaces	NumberWood	29.40	0.00
tblGrading	AcresOfGrading	0.00	2.50
tblLandUse	LandUseSquareFeet	1,058,400.00	1,324,117.20
tblLandUse	LotAcreage	190.91	86.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	NumberCatalytic	29.40	0.00
tblWoodstoves	NumberNoncatalytic	29.40	0.00

## 2.0 Emissions Summary

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Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.12 96	12,539.12 96	0.3225	0.2283	12,615.22 05
Energy	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.722 4	5,798.722 4	0.1111	0.1063	5,833.181 3
Mobile	9.0298	55.1976	110.2305	0.5149	40.8665	0.2789	41.1454	10.9315	0.2599	11.1914		52,631.97 43	52,631.97 43	2.1023		52,684.53 04
<b>Total</b>	<b>42.0310</b>	<b>70.0526</b>	<b>164.8118</b>	<b>0.6087</b>	<b>40.8665</b>	<b>1.7036</b>	<b>42.5701</b>	<b>10.9315</b>	<b>1.6845</b>	<b>12.6160</b>	<b>0.0000</b>	<b>70,969.82 62</b>	<b>70,969.82 62</b>	<b>2.5359</b>	<b>0.3346</b>	<b>71,132.93 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	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.12 96	12,539.12 96	0.3225	0.2283	12,615.22 05
Energy	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.722 4	5,798.722 4	0.1111	0.1063	5,833.181 3
Mobile	9.0298	55.1976	110.2305	0.5149	40.8665	0.2789	41.1454	10.9315	0.2599	11.1914		52,631.97 43	52,631.97 43	2.1023		52,684.53 04
<b>Total</b>	<b>42.0310</b>	<b>70.0526</b>	<b>164.8118</b>	<b>0.6087</b>	<b>40.8665</b>	<b>1.7036</b>	<b>42.5701</b>	<b>10.9315</b>	<b>1.6845</b>	<b>12.6160</b>	<b>0.0000</b>	<b>70,969.82 62</b>	<b>70,969.82 62</b>	<b>2.5359</b>	<b>0.3346</b>	<b>71,132.93 22</b>

## Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	6/3/2019	6/3/2019	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 73.72

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Scrapers	0	8.00	367	0.48

#### Trips and VMT

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	0	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>



Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1101	0.0676	0.8885	2.2900e-003	0.2236	1.3800e-003	0.2249	0.0593	1.2700e-003	0.0606		227.5045	227.5045	6.3700e-003		227.6637
<b>Total</b>	<b>0.1101</b>	<b>0.0676</b>	<b>0.8885</b>	<b>2.2900e-003</b>	<b>0.2236</b>	<b>1.3800e-003</b>	<b>0.2249</b>	<b>0.0593</b>	<b>1.2700e-003</b>	<b>0.0606</b>		<b>227.5045</b>	<b>227.5045</b>	<b>6.3700e-003</b>		<b>227.6637</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					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1101	0.0676	0.8885	2.2900e-003	0.2236	1.3800e-003	0.2249	0.0593	1.2700e-003	0.0606		227.5045	227.5045	6.3700e-003		227.6637
<b>Total</b>	<b>0.1101</b>	<b>0.0676</b>	<b>0.8885</b>	<b>2.2900e-003</b>	<b>0.2236</b>	<b>1.3800e-003</b>	<b>0.2249</b>	<b>0.0593</b>	<b>1.2700e-003</b>	<b>0.0606</b>		<b>227.5045</b>	<b>227.5045</b>	<b>6.3700e-003</b>		<b>227.6637</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.0298	55.1976	110.2305	0.5149	40.8665	0.2789	41.1454	10.9315	0.2599	11.1914		52,631.9743	52,631.9743	2.1023		52,684.5304
Unmitigated	9.0298	55.1976	110.2305	0.5149	40.8665	0.2789	41.1454	10.9315	0.2599	11.1914		52,631.9743	52,631.9743	2.1023		52,684.5304

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	5,550.72	5,609.52	5027.40	18,740,891	18,740,891
Total	5,550.72	5,609.52	5,027.40	18,740,891	18,740,891

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Single Family Housing	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
NaturalGas Unmitigated	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - Natural Gas**

**Unmitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	49289.1	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
<b>Total</b>		<b>0.5316</b>	<b>4.5423</b>	<b>1.9329</b>	<b>0.0290</b>		<b>0.3673</b>	<b>0.3673</b>		<b>0.3673</b>	<b>0.3673</b>		<b>5,798.7224</b>	<b>5,798.7224</b>	<b>0.1111</b>	<b>0.1063</b>	<b>5,833.1813</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	49.2891	0.5316	4.5423	1.9329	0.0290		0.3673	0.3673		0.3673	0.3673		5,798.7224	5,798.7224	0.1111	0.1063	5,833.1813
<b>Total</b>		<b>0.5316</b>	<b>4.5423</b>	<b>1.9329</b>	<b>0.0290</b>		<b>0.3673</b>	<b>0.3673</b>		<b>0.3673</b>	<b>0.3673</b>		<b>5,798.7224</b>	<b>5,798.7224</b>	<b>0.1111</b>	<b>0.1063</b>	<b>5,833.1813</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205
Unmitigated	32.4697	10.3126	52.6485	0.0648		1.0574	1.0574		1.0574	1.0574	0.0000	12,539.1296	12,539.1296	0.3225	0.2283	12,615.2205

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	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.1414	9.7539	4.1506	0.0623		0.7886	0.7886		0.7886	0.7886	0.0000	12,451.7647	12,451.7647	0.2387	0.2283	12,525.7593
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>32.4697</b>	<b>10.3126</b>	<b>52.6485</b>	<b>0.0648</b>		<b>1.0574</b>	<b>1.0574</b>		<b>1.0574</b>	<b>1.0574</b>	<b>0.0000</b>	<b>12,539.1296</b>	<b>12,539.1296</b>	<b>0.3225</b>	<b>0.2283</b>	<b>12,615.2205</b>

Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.5146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	27.3549					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.1414	9.7539	4.1506	0.0623		0.7886	0.7886		0.7886	0.7886	0.0000	12,451.76 47	12,451.76 47	0.2387	0.2283	12,525.75 93
Landscaping	1.4587	0.5588	48.4979	2.5600e-003		0.2688	0.2688		0.2688	0.2688		87.3649	87.3649	0.0839		89.4612
<b>Total</b>	<b>32.4697</b>	<b>10.3126</b>	<b>52.6485</b>	<b>0.0648</b>		<b>1.0574</b>	<b>1.0574</b>		<b>1.0574</b>	<b>1.0574</b>	<b>0.0000</b>	<b>12,539.12 96</b>	<b>12,539.12 96</b>	<b>0.3225</b>	<b>0.2283</b>	<b>12,615.22 05</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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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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Rancho Diamante Phase 1 (Operations) - Riverside-South Coast County, Summer

**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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**APPENDIX 3.4:**

**CALEEMOD OPERATIONS (PHASE 2) EMISSIONS MODEL OUTPUTS**

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**Rancho Diamante Phase 2 (Operations)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Grading -

Vehicle Trips - Trip Rates based on ITE 10th Edition (2017)

## Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	1.00
tblConstructionPhase	PhaseEndDate	12/18/2024	9/26/2024
tblConstructionPhase	PhaseStartDate	11/7/2024	9/26/2024
tblGrading	AcresOfGrading	0.00	2.50
tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	ST_TR	49.97	46.12
tblVehicleTrips	SU_TR	25.24	21.10
tblVehicleTrips	WD_TR	42.70	37.75

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Mobile	4.8861	37.5425	49.1232	0.2497	21.2593	0.1473	21.4065	5.6856	0.1371	5.8227		25,630.5185	25,630.5185	1.3305		25,663.7815
<b>Total</b>	<b>7.1276</b>	<b>37.6022</b>	<b>49.1834</b>	<b>0.2501</b>	<b>21.2593</b>	<b>0.1518</b>	<b>21.4111</b>	<b>5.6856</b>	<b>0.1416</b>	<b>5.8272</b>		<b>25,702.0956</b>	<b>25,702.0956</b>	<b>1.3320</b>	<b>1.3100e-003</b>	<b>25,735.7852</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Mobile	4.8861	37.5425	49.1232	0.2497	21.2593	0.1473	21.4065	5.6856	0.1371	5.8227		25,630.5185	25,630.5185	1.3305		25,663.7815
<b>Total</b>	<b>7.1276</b>	<b>37.6022</b>	<b>49.1834</b>	<b>0.2501</b>	<b>21.2593</b>	<b>0.1518</b>	<b>21.4111</b>	<b>5.6856</b>	<b>0.1416</b>	<b>5.8272</b>		<b>25,702.0956</b>	<b>25,702.0956</b>	<b>1.3320</b>	<b>1.3100e-003</b>	<b>25,735.7852</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	9/26/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Scrapers	0	8.00	367	0.48

#### Trips and VMT

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	0	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>



Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0411	0.4739	1.7100e-003	0.2236	1.2400e-003	0.2248	0.0593	1.1400e-003	0.0604		170.7347	170.7347	3.2600e-003		170.8161
<b>Total</b>	<b>0.0776</b>	<b>0.0411</b>	<b>0.4739</b>	<b>1.7100e-003</b>	<b>0.2236</b>	<b>1.2400e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1400e-003</b>	<b>0.0604</b>		<b>170.7347</b>	<b>170.7347</b>	<b>3.2600e-003</b>		<b>170.8161</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					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**3.2 Grading - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0411	0.4739	1.7100e-003	0.2236	1.2400e-003	0.2248	0.0593	1.1400e-003	0.0604		170.7347	170.7347	3.2600e-003		170.8161
<b>Total</b>	<b>0.0776</b>	<b>0.0411</b>	<b>0.4739</b>	<b>1.7100e-003</b>	<b>0.2236</b>	<b>1.2400e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1400e-003</b>	<b>0.0604</b>		<b>170.7347</b>	<b>170.7347</b>	<b>3.2600e-003</b>		<b>170.8161</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8861	37.5425	49.1232	0.2497	21.2593	0.1473	21.4065	5.6856	0.1371	5.8227		25,630.51 85	25,630.51 85	1.3305		25,663.78 15
Unmitigated	4.8861	37.5425	49.1232	0.2497	21.2593	0.1473	21.4065	5.6856	0.1371	5.8227		25,630.51 85	25,630.51 85	1.3305		25,663.78 15

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	3,775.00	4,612.00	2110.00	7,908,902	7,908,902
Total	3,775.00	4,612.00	2,110.00	7,908,902	7,908,902

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

5.0 Energy Detail

Historical Energy Use: N

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
NaturalGas Unmitigated	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804

**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					
Regional Shopping Center	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
<b>Total</b>		<b>6.5600e-003</b>	<b>0.0596</b>	<b>0.0501</b>	<b>3.6000e-004</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>71.5552</b>	<b>71.5552</b>	<b>1.3700e-003</b>	<b>1.3100e-003</b>	<b>71.9804</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**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					
Regional Shopping Center	0.608219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
<b>Total</b>		<b>6.5600e-003</b>	<b>0.0596</b>	<b>0.0501</b>	<b>3.6000e-004</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>71.5552</b>	<b>71.5552</b>	<b>1.3700e-003</b>	<b>1.3100e-003</b>	<b>71.9804</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**7.0 Water Detail**

## Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Winter

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

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

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

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

Equipment Type	Number
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**11.0 Vegetation**

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**Rancho Diamante Phase 2 (Operations)**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	100.00	1000sqft	19.67	100,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2026
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Project Characteristics -

Land Use - Total Lot Acreage based on information provided in the Site Plan.

Construction Phase - Operations Run Only.

Off-road Equipment - Operations Run Only.

Grading -

Vehicle Trips - Trip Rates based on ITE 10th Edition (2017)



## Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	1.00
tblConstructionPhase	PhaseEndDate	12/18/2024	9/26/2024
tblConstructionPhase	PhaseStartDate	11/7/2024	9/26/2024
tblGrading	AcresOfGrading	0.00	2.50
tblLandUse	LotAcreage	2.30	19.67
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	ST_TR	49.97	46.12
tblVehicleTrips	SU_TR	25.24	21.10
tblVehicleTrips	WD_TR	42.70	37.75

## 2.0 Emissions Summary

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Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Mobile	5.9103	38.0335	55.3372	0.2709	21.2593	0.1462	21.4054	5.6856	0.1360	5.8216		27,769.94 57	27,769.94 57	1.2661		27,801.59 77
<b>Total</b>	<b>8.1518</b>	<b>38.0932</b>	<b>55.3975</b>	<b>0.2712</b>	<b>21.2593</b>	<b>0.1507</b>	<b>21.4100</b>	<b>5.6856</b>	<b>0.1406</b>	<b>5.8262</b>		<b>27,841.52 28</b>	<b>27,841.52 28</b>	<b>1.2675</b>	<b>1.3100e-003</b>	<b>27,873.60 15</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	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Energy	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Mobile	5.9103	38.0335	55.3372	0.2709	21.2593	0.1462	21.4054	5.6856	0.1360	5.8216		27,769.94 57	27,769.94 57	1.2661		27,801.59 77
<b>Total</b>	<b>8.1518</b>	<b>38.0932</b>	<b>55.3975</b>	<b>0.2712</b>	<b>21.2593</b>	<b>0.1507</b>	<b>21.4100</b>	<b>5.6856</b>	<b>0.1406</b>	<b>5.8262</b>		<b>27,841.52 28</b>	<b>27,841.52 28</b>	<b>1.2675</b>	<b>1.3100e-003</b>	<b>27,873.60 15</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/26/2024	9/26/2024	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Graders	0	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Scrapers	0	8.00	367	0.48

#### Trips and VMT

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	0	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0398	0.5902	1.9100e-003	0.2236	1.2400e-003	0.2248	0.0593	1.1400e-003	0.0604		190.3263	190.3263	3.7300e-003		190.4196
<b>Total</b>	<b>0.0784</b>	<b>0.0398</b>	<b>0.5902</b>	<b>1.9100e-003</b>	<b>0.2236</b>	<b>1.2400e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1400e-003</b>	<b>0.0604</b>		<b>190.3263</b>	<b>190.3263</b>	<b>3.7300e-003</b>		<b>190.4196</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					
Fugitive Dust					2.6513	0.0000	2.6513	0.2863	0.0000	0.2863			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.0000</b>	<b>2.6513</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.2863</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**3.2 Grading - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0398	0.5902	1.9100e-003	0.2236	1.2400e-003	0.2248	0.0593	1.1400e-003	0.0604		190.3263	190.3263	3.7300e-003		190.4196
<b>Total</b>	<b>0.0784</b>	<b>0.0398</b>	<b>0.5902</b>	<b>1.9100e-003</b>	<b>0.2236</b>	<b>1.2400e-003</b>	<b>0.2248</b>	<b>0.0593</b>	<b>1.1400e-003</b>	<b>0.0604</b>		<b>190.3263</b>	<b>190.3263</b>	<b>3.7300e-003</b>		<b>190.4196</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.9103	38.0335	55.3372	0.2709	21.2593	0.1462	21.4054	5.6856	0.1360	5.8216		27,769.94 57	27,769.94 57	1.2661		27,801.59 77
Unmitigated	5.9103	38.0335	55.3372	0.2709	21.2593	0.1462	21.4054	5.6856	0.1360	5.8216		27,769.94 57	27,769.94 57	1.2661		27,801.59 77

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	3,775.00	4,612.00	2110.00	7,908,902	7,908,902
Total	3,775.00	4,612.00	2,110.00	7,908,902	7,908,902

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.556393	0.035040	0.189382	0.106465	0.012088	0.004430	0.017405	0.070208	0.001420	0.001115	0.004429	0.000881	0.000745

5.0 Energy Detail

Historical Energy Use: N



Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
NaturalGas Unmitigated	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804

**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					
Regional Shopping Center	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
<b>Total</b>		<b>6.5600e-003</b>	<b>0.0596</b>	<b>0.0501</b>	<b>3.6000e-004</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>71.5552</b>	<b>71.5552</b>	<b>1.3700e-003</b>	<b>1.3100e-003</b>	<b>71.9804</b>

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**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					
Regional Shopping Center	0.608219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
<b>Total</b>		<b>6.5600e-003</b>	<b>0.0596</b>	<b>0.0501</b>	<b>3.6000e-004</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>4.5300e-003</b>	<b>4.5300e-003</b>		<b>71.5552</b>	<b>71.5552</b>	<b>1.3700e-003</b>	<b>1.3100e-003</b>	<b>71.9804</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
Unmitigated	2.2349	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**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	0.2540					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.9800					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.4000e-004	9.0000e-005	0.0102	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0219	0.0219	6.0000e-005		0.0233
<b>Total</b>	<b>2.2349</b>	<b>9.0000e-005</b>	<b>0.0102</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>0.0219</b>	<b>0.0219</b>	<b>6.0000e-005</b>		<b>0.0233</b>

**7.0 Water Detail**

Rancho Diamante Phase 2 (Operations) - Riverside-South Coast County, Summer

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**7.1 Mitigation Measures Water****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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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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**APPENDIX 3.5:**

**LST ANALYSIS**

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Rough Grading Unmitigated

Rough Grading Unmitigated

NO<sub>2</sub><sup>1</sup>

Downwind Distance	NO <sub>2</sub> /NO <sub>x</sub> Ratio	SCREEN3 OP	NO <sub>2</sub> Concentration (ug/m3)	NO <sub>2</sub> Concentration (ppm)
20	0.05	270.200	14.32	0.0076
50	0.06	327.100	19.30	0.0103
70	0.06	360.800	23.09	0.0123
100	0.07	405.800	30.03	0.0160
200	0.11	334.400	38.12	0.0203
500	0.26	117.300	30.26	0.0161
1000	0.47	46.760	21.84	0.0116
2000	0.75	18.110	13.58	0.0072
3000	0.90	10.620	9.56	0.0051
4000	0.98	7.383	7.22	0.0038
5000	1.00	5.614	5.61	0.0030

CO Pounds Per day Grams Per day Grams Per Second Meters squared (area)

97.07 44030.211 1.52882678 26,304.567

Screen 3 Output  
9.48E+06

FINAL Concentration  
5.51E+02

0.479 ppm (1-hour)  
0.347 ppm (8-hour)

PM<sub>10</sub> Pounds Per day Grams Per day Grams Per Second Meters squared (area)

30.25 13721.169 0.4764 26,304.567

Screen 3 Output  
1.71E+07

FINAL Concentration  
3.09E+02

PM10 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

$$C_o^2 = 4.63E+01$$

$$e = 0.3150575$$

$$x \text{ (meters)} = 25$$

$$C_x = 13.72$$

**Total PM<sub>10</sub>: 13.72**

PM<sub>2.5</sub> Pounds Per day Grams Per day Grams Per Second Meters squared (area)

16.83 7633.9596 0.2651 26,304.567

Screen 3 Output  
1.71E+07

FINAL Concentration  
1.72E+02

PM2.5 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

$$C_o^2 = 2.58E+01$$

$$e = 0.3150575$$

$$x \text{ (meters)} = 25$$

$$C_x = 7.63$$

**Total PM<sub>2.5</sub>: 7.63**

<sup>1</sup> Per SCAQMD LST Handbook (Table 2-4) NO<sub>x</sub> to NO<sub>2</sub> conversion factor

<sup>2</sup> Conversion factor of 0.15 applied to convert from one-hour max to 24-hour average for area sources (<http://www.colorado.gov/airquality/permits/screen.pdf>)



Fine Grading Unmitigated

NO<sub>2</sub><sup>1</sup>

Downwind Distance	NO <sub>2</sub> /NO <sub>x</sub> Ratio	SCREEN3 OP	NO <sub>2</sub> Concentration (ug/m3)	NO <sub>2</sub> Concentration (ppm)
20	0.05	270.200	14.32	0.0076
50	0.06	327.100	19.30	0.0103
70	0.06	360.800	23.09	0.0123
100	0.07	405.800	30.03	0.0160
200	0.11	334.400	38.12	0.0203
500	0.26	117.300	30.26	0.0161
1000	0.47	46.760	21.84	0.0116
2000	0.75	18.110	13.58	0.0072
3000	0.90	10.620	9.56	0.0051
4000	0.98	7.383	7.22	0.0038
5000	1.00	5.614	5.61	0.0030

<b>CO</b>	Pounds Per day	Grams Per day	Grams Per Second	Meters squared (area)
	77.81	35294.022	1.22548689	26,304.567
			Screen 3 Output	
			9.48E+06	
			FINAL Concentration	
			4.42E+02	
			0.384 ppm (1-hour)	
			0.278 ppm (8-hour)	

<b>PM<sub>10</sub></b>	Pounds Per day	Grams Per day	Grams Per Second	Meters squared (area)
	28.31	12841.2	0.4459	26,304.567
			Screen 3 Output	
			1.71E+07	
			FINAL Concentration	
			2.89E+02	

PM10 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

$C_o^2$       4.34E+01  
 e          0.3150575  
 x (meters)      25  
 $C_x$           12.84

**Total PM<sub>10</sub>: 12.84**

<b>PM<sub>2.5</sub></b>	Pounds Per day	Grams Per day	Grams Per Second	Meters squared (area)
	15.05	6826.5652	0.2370	26,304.567
			Screen 3 Output	
			1.71E+07	
			FINAL Concentration	
			1.54E+02	

PM2.5 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

$C_o^2$       2.30E+01  
 e          0.3150575  
 x (meters)      25  
 $C_x$           6.83

**Total PM<sub>2.5</sub>: 6.83**

<sup>1</sup> Per SCAQMD LST Handbook (Table 2-4) NO<sub>x</sub> to NO<sub>2</sub> conversion factor  
<sup>2</sup> Conversion factor of 0.15 applied to convert from one-hour max to 24-hour average for area sources (<http://www.colorado.gov/airquality/permits/screen.pdf>)  
 C:\Users\hqureshi\Desktop\9791\_SCREEN3\09791\_SCREEN3 Calcs-Site Prep.xls\Fine Grading Unmitigated

Rough Grading Mitigated

NO<sub>2</sub><sup>1</sup>

Downwind Distance	NO <sub>2</sub> /NO <sub>x</sub> Ratio	SCREEN3 OP	NO <sub>2</sub> Concentration (ug/m3)	NO <sub>2</sub> Concentration (ppm)
20	0.05	106.300	5.63	0.0030
50	0.06	128.700	7.59	0.0040
70	0.06	141.900	9.08	0.0048
100	0.07	159.700	11.82	0.0063
200	0.11	131.500	14.99	0.0080
500	0.26	46.130	11.90	0.0063
1000	0.47	18.390	8.59	0.0046
2000	0.75	7.122	5.34	0.0028
3000	0.90	4.178	3.76	0.0020
4000	0.98	2.905	2.84	0.0015
5000	1.00	2.208	2.21	0.0012

CO Pounds Per day Grams Per day Grams Per Second Meters squared (area)  
 67.98 30835.209 1.07066699 26,304.567

Screen 3 Output  
 9.48E+06

FINAL Concentration  
 3.86E+02

0.336 ppm (1-hour)  
 0.243 ppm (8-hour)

PM<sub>10</sub> Pounds Per day Grams Per day Grams Per Second Meters squared (area)  
 11.69 5302.4948 0.1841 26,304.567

Screen 3 Output  
 1.71E+07

FINAL Concentration  
 1.19E+02

PM10 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

C<sub>o</sub><sup>2</sup> 1.79E+01  
 e 0.3150575  
 x (meters) 25

C<sub>x</sub> 5.30

**Total PM<sub>10</sub>: 5.30**

PM<sub>2.5</sub> Pounds Per day Grams Per day Grams Per Second Meters squared (area)  
 6.63 3007.3174 0.1044 26,304.567

Screen 3 Output  
 1.71E+07

FINAL Concentration  
 6.77E+01

PM2.5 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

C<sub>o</sub><sup>2</sup> 1.02E+01  
 e 0.3150575  
 x (meters) 25

C<sub>x</sub> 3.01

**Total PM<sub>2.5</sub>: 3.01**

<sup>1</sup> Per SCAQMD LST Handbook (Table 2-4) NO<sub>x</sub> to NO<sub>2</sub> conversion factor

<sup>2</sup> Conversion factor of 0.15 applied to convert from one-hour max to 24-hour average for area sources (<http://www.colorado.gov/airquality/permits/screen.pdf>)

Fine Grading Mitigated

NO<sub>2</sub><sup>1</sup>

Downwind Distance	NO <sub>2</sub> /NO <sub>x</sub> Ratio	SCREEN3 OP	NO <sub>2</sub> Concentration (ug/m3)	NO <sub>2</sub> Concentration (ppm)
20	0.05	102.000	5.41	0.0029
50	0.06	138.500	8.17	0.0044
70	0.06	160.200	10.25	0.0055
100	0.07	182.500	13.51	0.0072
200	0.11	107.900	12.30	0.0066
500	0.26	33.880	8.74	0.0047
1000	0.47	12.360	5.77	0.0031
2000	0.75	4.612	3.46	0.0018
3000	0.90	2.681	2.41	0.0013
4000	0.98	1.858	1.82	0.0010
5000	1.00	1.409	1.41	0.0008

**CO**      Pounds Per day      Grams Per day      Grams Per Second      Meters squared (area)

67.77      30739.955      1.06735955      26,304.567

Screen 3 Output  
9.48E+06

FINAL Concentration  
3.85E+02

0.334 ppm (1-hour)  
0.242 ppm (8-hour)

**PM<sub>10</sub>**      Pounds Per day      Grams Per day      Grams Per Second      Meters squared (area)

11.5      5216.3123      0.1811      26,304.567

Screen 3 Output  
1.71E+07

FINAL Concentration  
1.17E+02

PM10 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

C<sub>o</sub><sup>2</sup>      1.78E+01  
e      0.3150575  
x (meters)      25

C<sub>x</sub>      5.22

**Total PM<sub>10</sub>:**      5.22

**PM<sub>2.5</sub>**      Pounds Per day      Grams Per day      Grams Per Second      Meters squared (area)

6.46      2930.2067      0.1017      26,304.567

Screen 3 Output  
1.71E+07

FINAL Concentration  
6.59E+01

PM2.5 Calculation

$$C_x = 0.9403 C_o e^{-0.0462 x}$$

C<sub>o</sub><sup>2</sup>      9.89E+00  
e      0.3150575  
x (meters)      25

C<sub>x</sub>      2.93

**Total PM<sub>2.5</sub>:**      2.93

<sup>1</sup> Per SCAQMD LST Handbook (Table 2-4) NO<sub>x</sub> to NO<sub>2</sub> conversion factor

<sup>2</sup> Conversion factor of 0.15 applied to convert from one-hour max to 24-hour average for area sources (<http://www.colorado.gov/airquality/permits/screen.pdf>)

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

Construction LST Analysis - PM10/PM2.5

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 1.00000  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 162.1868  
LENGTH OF SMALLER SIDE (M) = 162.1868  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
1.	0.1705E+08	6	1.0	1.0	10000.0	1.00	45.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.1705E+08	1.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*

ConsPM10

\*\*\*\*\*

02/26/16  
09:29:41

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

Construction LST Analysis - CO

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 1.0000  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 162.1868  
LENGTH OF SMALLER SIDE (M) = 162.1868  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*

\*\*\* SCREEN DISCRETE DISTANCES \*\*\*

\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.9480E+07	5	1.0	1.0	10000.0	5.00	45.

\*\*\*\*\*

\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*

\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.9480E+07	25.	0.

\*\*\*\*\*

ConsPM10

\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

02/26/16  
09:30:45

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

Construction LST Analysis - NO2 Unmitigated

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.295633E-04  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 162.1868  
LENGTH OF SMALLER SIDE (M) = 162.1868  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BOUY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
20.	270.2	5	1.0	1.0	10000.0	5.00	45.
50.	327.1	5	1.0	1.0	10000.0	5.00	45.
70.	360.8	5	1.0	1.0	10000.0	5.00	45.
100.	405.8	5	1.0	1.0	10000.0	5.00	45.
200.	334.4	5	1.0	1.0	10000.0	5.00	45.
500.	117.3	5	1.0	1.0	10000.0	5.00	45.
1000.	46.76	5	1.0	1.0	10000.0	5.00	45.
2000.	18.11	5	1.0	1.0	10000.0	5.00	37.
3000.	10.62	5	1.0	1.0	10000.0	5.00	26.
4000.	7.383	5	1.0	1.0	10000.0	5.00	1.
5000.	5.614	5	1.0	1.0	10000.0	5.00	15.

ConsPM10

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	405.8	100.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

02/26/16  
09:31:58

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

Construction LST Analysis - NO2 Mitigated

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.116296E-04  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 162.1868  
LENGTH OF SMALLER SIDE (M) = 162.1868  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
-----	-----	-----	-----	-----	-----	-----	-----

ConspM10							
20.	106.3	5	1.0	1.0	10000.0	5.00	45.
50.	128.7	5	1.0	1.0	10000.0	5.00	45.
70.	141.9	5	1.0	1.0	10000.0	5.00	45.
100.	159.7	5	1.0	1.0	10000.0	5.00	45.
200.	131.5	5	1.0	1.0	10000.0	5.00	45.
500.	46.13	5	1.0	1.0	10000.0	5.00	45.
1000.	18.39	5	1.0	1.0	10000.0	5.00	45.
2000.	7.122	5	1.0	1.0	10000.0	5.00	37.
3000.	4.178	5	1.0	1.0	10000.0	5.00	26.
4000.	2.905	5	1.0	1.0	10000.0	5.00	1.
5000.	2.208	5	1.0	1.0	10000.0	5.00	15.

\*\*\*\*\*  
 \*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
 \*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
----- SIMPLE TERRAIN	----- 159.7	----- 100.	----- 0.

\*\*\*\*\*  
 \*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
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