

# Air Quality Assessment

## Bridge Point Upland Project City of Upland, California

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November 2019

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**LIST OF ABBREVIATED TERMS**

AQMP	air quality management plan
AB	Assembly Bill
ADT	average daily traffic
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CO	carbon monoxide
cy	cubic yards
DPM	diesel particulate matter
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
H <sub>2</sub> S	hydrogen sulfide
Pb	lead
LST	local significance threshold
µg/m <sup>3</sup>	micrograms per cubic meter
mg/m <sup>3</sup>	milligrams per cubic meter
NAAQS	National Ambient Air Quality Standards
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxide
O <sub>3</sub>	ozone
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
ppm	parts per million
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
UGP	Upland General Plan
SBCOG	San Bernardino Council of Governments
SB	Senate Bill
SRA	source receptor area
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
SF	square foot
SO <sub>4-2</sub>	sulfates
SO <sub>2</sub>	sulfur dioxide
TAC	toxic air contaminant
C <sub>2</sub> H <sub>3</sub> Cl	vinyl chloride
VOC	volatile organic compound

# 1 INTRODUCTION

This report documents the results of an Air Quality Assessment completed for the Bridge Point Upland Project. The purpose of this Air Quality Assessment is to evaluate the potential construction and operational emissions associated with the proposed Project and determine the level of impact the Project would have on the environment.

## 1.1 Project Location

The Bridge Point Upland Project (proposed Project) is located in the City of Upland north of Interstate 10 (I-10), south of State Route 210 (SR-210), west of Interstate 15 (I-15), and east of State Route 57 (SR-57) as depicted in Exhibit 1: Regional Vicinity. The overall Project site is located on approximately 50.25 acres northeast of Central Avenue and Foothill Boulevard, as depicted in Exhibit 2: Site Vicinity.

The Project site is in a predominately industrial and commercial area. The land uses surrounding the Project site consist of a mix of uses including industrial, commercial, residential, an airport, and a major transportation corridor. Properties zoned for Highway Commercial uses are located immediately south of the site. Foothill Boulevard is located farther south of the site. Foothill Boulevard is located further south of the site. Cable Airport is located directly north of the site and a portion of the airport, along with industrial uses, are located west of the site. Commercial uses, including a Lowe's Home Improvement Store and a commercial shopping center, are located east of the site.

## 1.2 Project Description

The proposed Project is comprised of one warehouse/ parcel delivery service building with an ancillary office/retail space on approximately 50.25 acres as shown in Exhibit 3: Site Plan. The Project site is located on Assessor Parcel Nos. (APN) 1006-351-09, 1006-351-10, 1006-572-11, 1006-551-12, 1006-551-22, and 1006-574-10. Project entitlement includes a Design Review and Site Plan Review application; a Lot Line Adjustment; and a determination from the Airport Land Use Committee that the Project is compatible with the Cable Airport Land Use Compatibility Plan.

The Project building is proposed to be one level and total approximately 201,096 square feet (sf), of which approximately 191,096 sf would be warehouse/parcel delivery uses and 10,000 sf would be office/retail uses. The office/retail component would include an office area for employees, and a small area for visitors to pick up pre-ordered packages. To be conservative, this analysis evaluates a maximum development scenario that includes a 276,250 sf building.

The western building frontage would include 16 dock-hi doors for trucks, and 8 van loading doors would be located on both the northern and southern building frontages. The Project would require a minimum of 220 automobile parking spaces. Trailer parking for the warehouse building would include approximately 12 stalls and an additional 1,104 van parking stalls would be located on-site.

### Building Design

The warehouse/parcel delivery service building is designed as a class A building. The building architecture features a modern aesthetic including glazing with brow projections to focus attention on the entries and street frontages. The major building material is concrete which lends itself to a modern palette with

reveals to enhance the building architecture. The building would have a maximum height of approximately 44 feet with parapets and façade, which would provide depth and shadowing and points of visual interest for the architecture. This relief in the design also provides locations for accents in the landscape design.

### **Access and Parking**

Vehicular access to the Project would be provided via 13th Street, the north leg of Central Avenue/Foothill Boulevard, and two right-in/right-out driveways on Foothill Boulevard. The driveway on 13<sup>th</sup> Street would provide access to automobiles and vans only; trucks would access the site only via the driveway at the north leg of Central Avenue/Foothill Boulevard. Street improvements would be provided along Foothill Boulevard at the Project frontage to include improvements to curbs, gutters, sidewalks, street lights, traffic signal equipment and signing and striping as required. Street improvements would also be made to Central Avenue and 13th Street.

### **Landscaping**

The Project would be landscaped along all four frontages of the site, including landscaped slopes along the western and southern portions of the site. Landscaping would also be installed throughout the parking areas. The conceptual landscape design would feature California drought tolerant and native species in an aesthetically pleasing and colorful palette.

The Project building would include 455,380 sf of landscaping, which would account for more than 21 percent in landscape coverage, more than four times the City's minimum requirement of 5 percent. The warehouse/parcel delivery service building would be setback more than 200 feet on the southern building frontage and would exceed minimum setback requirements of 5 feet for front and side setbacks and rear setbacks of 10 feet.

### **Construction**

Construction of the proposed Project is expected to commence in the first quarter of 2020 with a construction duration of approximately 7 months. Project construction would be completed in one phase with buildout by the third quarter of 2020. Total excavation and fill of soils for the proposed Project is mostly balanced with approximately 431 cubic yards (cy) of exported soil.

### **Existing Project Site**

The Project site consists of both disturbed land on the western portion of the site and undeveloped land on the eastern portion of the site. The disturbed portion of the land is used for outdoor dirt, sand, gravel and rock stockpiling, processing and crushing; the existing stockpiles are being processed and removed by the current operator as part of existing operations, and the removal of those materials is not a part of the Project. No structures are currently located on the site. There is existing utility access (water, sewer, electricity, gas) located in the immediate vicinity of the proposed Project and these services would be extended to the site to serve the proposed Project.

### Exhibit 1: Regional Vicinity





## Exhibit 2: Site Vicinity



Source: Google Maps, 2018.



### Exhibit 3: Site Plan



Source: Herdman Architecture + Design, 2019.

Not to Scale

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## 2 ENVIRONMENTAL SETTING

### 2.1 Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The proposed Project is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. The basin is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter<sup>1</sup>. Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

The SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

Although the SCAB has a semiarid climate, the air closer to the Earth's surface is typically moist because of the presence of a shallow marine layer. Except for occasional periods when dry, continental air is brought into the basin by offshore winds, the "ocean effect" is dominant. Periods of heavy fog are frequent and low clouds known as high fog are characteristic climatic features, especially along the coast. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the basin.

Wind patterns across the basin are characterized by westerly or southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically higher during the dry summer months than during the rainy winter.

Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During winter and fall, surface high-pressure systems over the basin, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the basin generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

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<sup>1</sup> South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the “mixing height.” The combination of winds and inversions is a critical determinant leading to highly degraded air quality for the basin in the summer and generally good air quality in the winter.

## 2.2 Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead are primary air pollutants. Of these, CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are criteria pollutants. ROG and NO<sub>x</sub> are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O<sub>3</sub>) is formed by a chemical reaction between ROG and NO<sub>x</sub> in the presence of sunlight. O<sub>3</sub> and nitrogen dioxide (NO<sub>2</sub>) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in [Table 1: Air Contaminants and Associated Public Health Concerns](#).

<b>Pollutant</b>	<b>Major Man-Made Sources</b>	<b>Human Health Effects</b>
Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> )	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.
Ozone (O <sub>3</sub> )	Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) <sup>1</sup> and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
Sulfur Dioxide (SO <sub>2</sub> )	A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.



Table 1: Air Contaminants and Associated Public Health Concerns (continued)		
Pollutant	Major Man-Made Sources	Human Health Effects
Nitrogen Dioxide (NO <sub>2</sub> )	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone. Contributes to global warming and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead (Pb)	Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ.
Notes:		
<sup>1</sup> Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROG and VOCs. Both ROG and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).		
Source: California Air Pollution Control Officers Association (CAPCOA), <i>Health Effects</i> , <a href="http://www.capcoa.org/health-effects/">http://www.capcoa.org/health-effects/</a> , Accessed September 4, 2018.		

### Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

## Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project are documented by measurements made by the South Coast Air Quality Management District (SCAQMD), the air pollution regulatory agency in the SCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Ozone (O<sub>3</sub>) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are pollutants of concern in the SCAB. The closest air monitoring station to the proposed Project that monitors ambient concentrations of these pollutants is the Upland Monitoring Station (located approximately 3.0 miles to the east). Local air quality data from 2016 to 2018 are provided in Table 2: Ambient Air Quality Data. Table 2 lists the monitored maximum concentrations and number of exceedances of federal or state air quality standards for each year.

<b>Table 2: Ambient Air Quality Data</b>			
<b>Pollutant</b>	<b>Upland Monitoring Station<sup>1</sup></b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Ozone (O<sub>3</sub>)</b>			
1-hour Maximum Concentration (ppm)	0.156	0.150	0.130
8-hour Maximum Concentration (ppm)	0.116	0.127	0.111
<i>Number of Days Standard Exceeded</i>			
CAAQS 1-hour (>0.09 ppm)	53	66	25
NAAQS 8-hour (>0.070 ppm)	88	87	52
<b>Carbon Monoxide (CO)</b>			
1-hour Maximum Concentration (ppm)	1.710	1.873	1.73
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>35 ppm)	0	0	0
CAAQS 1-hour (>20 ppm)	0	0	0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>			
1-hour Maximum Concentration (ppm)	70.1	64.1	58.7
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>100 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
<b>Particulate Matter Less Than 10 Microns (PM<sub>10</sub>)</b>			
National 24-hour Maximum Concentration	184.0	106.5	156.6
State 24-hour Maximum Concentration	—	—	—
State Annual Average Concentration (CAAQS=20 µg/m <sup>3</sup> )	—	—	—
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>150 µg/m <sup>3</sup> )	1	0	*
CAAQS 24-hour (>50 µg/m <sup>3</sup> )	—	—	—
<b>Particulate Matter Less Than 2.5 Microns (PM<sub>2.5</sub>)</b>			
National 24-hour Maximum Concentration	—	—	—
State 24-hour Maximum Concentration	44.9	53.2	47.9
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>35 µg/m <sup>3</sup> )	—	—	—
Notes: NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; µg/m <sup>3</sup> = micrograms per cubic meter; NM = not measured; * = insufficient data available to determine value <sup>1</sup> Measurements taken at the Upland Monitoring Station at 1350 San Bernardino Road, Upland, California 91786 (CARB# 36175)			
footnotes continued on next page)			



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Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database (<https://www.arb.ca.gov/adam>) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System (<https://www.arb.ca.gov/aqmis2/aqdselect.php>).

## 2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of toxics are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive land uses surrounding the Project consist mostly of single-family residences, educational institutions, and recreational facilities. Table 3: Sensitive Receptors, lists the distances and locations of sensitive receptors within the Project vicinity. The distances depicted in Table 3 are based on the distance from the Project site to the vicinity sensitive receptors.

<b>Table 3: Sensitive Receptors</b>	
<b>Receptor Type/Description</b>	<b>Distance and Direction from the Project Site</b>
MG Parkview Apartments	1,040 feet southeast
Middle East Gospel Outreach	1,050 feet south
Single Family Residential Neighborhood	1,190 feet east
California Optical	1,250 feet northeast
Multi-Family Residential Neighborhood	1,270 feet east
Ovation School of the Performing Arts	1,300 feet northeast
Prime Time Dance School of the Arts	1,550 feet south
Cabrillo Elementary School	1,570 feet southeast
North Upland Terrace Apartments	1,710 feet southeast
Single Family Residential Neighborhood	1,860 feet northeast
Single Family Residential Neighborhood	1,880 feet southeast
Cabrillo Park	1,920 feet southeast
Corporate Center Office Buildings	1,990 feet west
Park Central Apartments	2,030 feet south
Greenbelt Park	2,350 feet northeast

### 3 REGULATORY SETTING

#### 3.1 Federal

##### **Federal Clean Air Act**

Air quality is federally protected by the Clean Air Act and its amendments. Under the Federal Clean Air Act (FCAA), the EPA developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including ozone, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. Environmental Protection Agency (EPA) can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of Federal notification, the EPA is required to develop a Federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. The EPA has designated enforcement of air pollution control regulations to the individual states. Applicable federal standards are summarized in [Table 4: State and Federal Ambient Air Quality Standards](#).

#### 3.2 State of California

##### **California Air Resources Board**

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in [Table 4](#), are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan for meeting federal clean air standards for the State of California. Like the EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in [Table 4](#).

**Table 4: State and Federal Ambient Air Quality Standards**

Pollutant	Averaging Time	State Standards <sup>1</sup>	Federal Standards <sup>2</sup>
Ozone (O <sub>3</sub> ) <sup>2, 5, 7</sup>	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm
	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	NA
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )
Nitrogen Dioxide (NO <sub>2</sub> )	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.10 ppm <sup>11</sup>
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )
Sulfur Dioxide (SO <sub>2</sub> ) <sup>8</sup>	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	0.14 ppm (365 µg/m <sup>3</sup> )
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm (196 µg/m <sup>3</sup> )
	Annual Arithmetic Mean	NA	0.03 ppm (80 µg/m <sup>3</sup> )
Particulate Matter (PM <sub>10</sub> ) <sup>1, 3, 6</sup>	24-Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	NA
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>3, 4, 6, 9</sup>	24-Hour	NA	35 µg/m <sup>3</sup>
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
Sulfates (SO <sub>4-2</sub> )	24 Hour	25 µg/m <sup>3</sup>	NA
Lead (Pb) <sup>10, 11</sup>	30-Day Average	1.5 µg/m <sup>3</sup>	NA
	Calendar Quarter	NA	1.5 µg/m <sup>3</sup>
	Rolling 3-Month Average	NA	0.15 µg/m <sup>3</sup>
Hydrogen Sulfide (H <sub>2</sub> S)	1 Hour	0.03 ppm (0.15 µg/m <sup>3</sup> )	NA
Vinyl Chloride (C <sub>2</sub> H <sub>3</sub> Cl) <sup>10</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	NA

**Notes:**

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter; – = no information available.

<sup>1</sup> California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM<sub>10</sub>, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM<sub>10</sub> annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.

<sup>2</sup> National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4<sup>th</sup> highest daily concentrations is 0.070 ppm or less. The 24-hour PM<sub>10</sub> standard is attained when the 3-year average of the 99<sup>th</sup> percentile of monitored concentrations is less than 150 µg/m<sup>3</sup>. The 24-hour PM<sub>2.5</sub> standard is attained when the 3-year average of 98<sup>th</sup> percentiles is less than 35 µg/m<sup>3</sup>.

<sup>3</sup> Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM<sub>10</sub> is met if the 3-year average falls below the standard at every site. The annual PM<sub>2.5</sub> standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.

<sup>4</sup> On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour ozone concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.

<sup>5</sup> The national 1-hour ozone standard was revoked by the EPA on June 15, 2005.

<sup>6</sup> In June 2002, CARB established new annual standards for PM<sub>2.5</sub> and PM<sub>10</sub>.

<sup>7</sup> The 8-hour California ozone standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.

<sup>8</sup> On June 2, 2010, the EPA established a new 1-hour SO<sub>2</sub> standard, effective August 23, 2010, which is based on the 3-year average of the annual 99<sup>th</sup> percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO<sub>2</sub> NAAQS however must continue to be used until one year following EPA initial designations of the new 1-hour SO<sub>2</sub> NAAQS.

<sup>9</sup> In December 2012, EPA strengthened the annual PM<sub>2.5</sub> NAAQS from 15.0 to 12.0 µg/m<sup>3</sup>. In December 2014, the EPA issued final area designations for the 2012 primary annual PM<sub>2.5</sub> NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

<sup>10</sup> CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.

<sup>11</sup> National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.

Source: South Coast Air Quality Management District, *Air Quality Management Plan*, 2016; California Air Resources Board, *Ambient Air Quality Standards*, May 6, 2016.

### 3.3 Regional

#### South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The agency's primary responsibility is ensuring that federal and state ambient air quality standards are attained and maintained in the SCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The SCAQMD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the AQMP is to set forth a comprehensive and integrated program that would lead the SCAB into compliance with the federal 24-hour PM<sub>2.5</sub> air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the federal 8-hour ozone standards. The AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2016 *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) and updated emission inventory methodologies for various source categories.

The SCAQMD has published the *CEQA Air Quality Handbook* (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Local Significance Thresholds [LST] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by California Environmental Quality Act (CEQA) and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the *CEQA Air Quality Handbook* and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under state law as a Regional Transportation Planning Agency and a Council of Governments.

The state and national attainment status designations for the SCAB are summarized in [Table 5: South Coast Air Basin Attainment Status](#). The SCAB is currently designated as a nonattainment area with respect to the state ozone, PM<sub>10</sub>, and PM<sub>2.5</sub> standards, as well as the national 8-hour ozone and PM<sub>2.5</sub> standards. The SCAB is designated as attainment or unclassified for the remaining State and federal standards.

**Table 5: South Coast Air Basin Attainment Status**

Pollutant	Federal	State
Ozone (O <sub>3</sub> ) (1 Hour Standard)	Non-Attainment (Extreme)	Non-Attainment
Ozone (O <sub>3</sub> ) (8 Hour Standard)	Non-Attainment (Extreme)	Non-Attainment
Particulate Matter (PM <sub>2.5</sub> ) (24 Hour Standard)	Non-Attainment (Serious)	--
Particulate Matter (PM <sub>2.5</sub> ) (Annual Standard)	Non-Attainment (Moderate)	Non-Attainment
Particulate Matter (PM <sub>10</sub> ) (24 Hour Standard)	Attainment (Maintenance)	Non-Attainment
Particulate Matter (PM <sub>10</sub> ) (Annual Standard)	--	Non-Attainment
Carbon Monoxide (CO) (1 Hour Standard)	Attainment (Maintenance)	Attainment
Carbon Monoxide (CO) (8 Hour Standard)	Attainment (Maintenance)	Attainment
Nitrogen Dioxide (NO <sub>2</sub> ) (1 Hour Standard)	Unclassifiable/Attainment	Attainment
Nitrogen Dioxide (NO <sub>2</sub> ) (Annual Standard)	Attainment (Maintenance)	Attainment
Sulfur Dioxide (SO <sub>2</sub> ) (1 Hour Standard)	Unclassifiable/Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> ) (24 Hour Standard)	--	Attainment
Lead (Pb) (30 Day Standard)	Unclassifiable/Attainment	--
Lead (Pb) (3 Month Standard)	--	Attainment
Sulfates (SO <sub>4-2</sub> ) (24 Hour Standard)	--	Attainment
Hydrogen Sulfide (H <sub>2</sub> S) (1 Hour Standard)	--	Unclassified

Source: South Coast Air Quality Management District, *Air Quality Management Plan*, 2016; U.S. EPA, *Nonattainment Areas for Criteria Pollutants (Green Book)*, October 24, 2018.

The following is a list of SCAQMD rules that are required of construction activities associated with the proposed Project:

- Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM<sub>10</sub> suppression techniques are summarized below.



- a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
  - b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
  - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
  - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
  - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

### 3.4 Local

#### City of Upland General Plan

The City of Upland General Plan (UGP) is a roadmap that encompasses the hopes, aspirations, values and dreams of the community. Project-relevant policies specific to air quality are mentioned in this section. Where inconsistencies exist, if any, they are addressed in the respective impact analysis below. UGP policies that address air quality impacts include the following:

**Goal LU-2: A community with stable and livable residential neighborhoods.**

Policy LU-2.3: Provide healthy, affordable and desirable living environments consistent with adopted code requirements that set forth the acceptable health and safety standards for the occupancy of housing.

**Goal LU-4: A community whose land use patterns focus growth in ways that are sustainable and environmentally responsible, including the implementation of smart growth practices and the reduction of greenhouse gas emissions consistent with Assembly Bill (AB) 32, Senate Bill (SB) 375, the Regional Transportation Plan and Sustainable Community Strategy.**

Policy LU-4.4: Work to identify and support financial and administrative incentives (i.e., fee reductions) to encourage desired land uses, development patterns, and alternative modes of transportation that reduce greenhouse gas emissions.

**Goal OSC-4: Healthful air quality in Upland and the surrounding region, and reduced locally generated pollutant emissions.**

- Policy OSC-4.1: Promote land use patterns that reduce the number and length of motor vehicle trips.
- Policy OSC-4.4: To the extent practicable, separate sensitive land uses (schools, senior centers, medical facilities, and residences) from significant sources of air pollutants, toxic air contaminants, or odor emissions.
- Policy OSC-4.5: Require new development with sensitive uses located adjacent to mobile and stationary toxic air contaminants to be designed with consideration of site and building orientation, location of trees, and incorporation of appropriate technology for improved air quality (i.e., ventilation and filtration) to lessen any potential health risks.
- Policy OSC-4.6: Ensure that all land use decisions are made in an equitable manner to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.
- Policy OSC-4.8: Promote expansion of employment opportunities within Upland to reduce commuting to areas outside of the City.
- Policy OSC-4.9: Encourage employers to offer employees incentives for ridesharing.
- Policy OSC-4.10: Continue to enforce the vehicle idling restrictions established by the State.
- Policy OSC-4.11: Review proposed development projects as required by CEQA to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) through project design.
- Policy OSC-4.12: New sources of toxic air pollutants shall prepare a Health Risk Assessment as required by Section 44300 of the California Health and Safety Code. The Assessment shall be used to establish appropriate land use buffer zones around those areas posing substantial health risks based upon the California Air Resources Board's guidance provided in the Air Quality Land Use Handbook.
- Policy OSC-4.13: Require best management practices to reduce air pollution associated with construction of development projects.
- Policy OSC-4.14: Review construction plans associated with development projects to determine if all feasible mitigation measures are included.
- Policy OSC-4.15: Promote green building practices that support healthy indoor living and working environments that are well-ventilated and contaminant-free.

- Policy OSC-4.18: Coordinate air quality planning efforts with other local, regional and State agencies, and encourage community participation in air quality planning.
- Policy OSC-4.19: Design and conduct efforts to involve the public and affected/interested parties in the implementation of air quality improvement plans and programs. This may include public forums and workshops, community and education programs, informational brochures and web postings, and a variety of other media forms to maximize citizen involvement.

## 4 SIGNIFICANCE CRITERIA AND METHODOLOGY

### 4.1 Air Quality Thresholds

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a Project normally would have a significant effect on the environment if it would:

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

#### SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in [Table 6: South Coast Air Quality Management District Emissions Thresholds](#).

<b>Table 6: South Coast Air Quality Management District Emissions Thresholds</b>		
<b>Criteria Air Pollutants and Precursors (Regional)</b>	<b>Construction-Related</b>	<b>Operational-Related</b>
	<b>Average Daily Emissions (pounds/day)</b>	<b>Average Daily Emission (pounds/day)</b>
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO <sub>x</sub> )	100	55
Sulfur Oxides (SO <sub>x</sub> )	150	150
Coarse Particulates (PM <sub>10</sub> )	150	150
Fine Particulates (PM <sub>2.5</sub> )	55	55
Source: South Coast Air Quality Management District, <i>CEQA Air Quality Handbook</i> , 1993 (PM <sub>2.5</sub> threshold adopted June 1, 2007).		

#### Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the proposed Project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 ppm
- 8-hour = 9 ppm

The significance of localized impacts depends on whether ambient CO levels near the Project site are above state and federal CO standards. The SCAB has been designated as attainment under the 1-hour and 8-hour standards.

### Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed LSTs for emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a Project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres or less on a single day. The City of Upland is located within SCAQMD SRA 32. Table 7: Local Significance Thresholds (Construction/Operations), shows the LSTs for a 1-acre, 2-acre, and 5-acre Project site in SRA 32 with sensitive receptors located within 200 meters of the Project site.

<b>Table 7: Local Significance Thresholds (Construction/Operations)</b>				
<b>Project Size</b>	<b>Nitrogen Oxide (NO<sub>x</sub>) – lbs/day</b>	<b>Carbon Monoxide (CO) – lbs/day</b>	<b>Coarse Particulates (PM<sub>10</sub>) – lbs/day</b>	<b>Fine Particulates (PM<sub>2.5</sub>) – lbs/day</b>
1 Acre	334/334	5,691/5,691	103/25	32/8
2 Acres	378/378	6,778/6,778	66/16	36/9
5 Acres	486/486	9,611/9,611	140/34	45/11

Source: South Coast Air Quality Management District, *Localized Significance Threshold Methodology*, July 2008.

## 4.2 Methodology

This air quality impact analysis considers construction and operational impacts associated with the proposed Project. Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with proposed Project construction would generate emissions of criteria air pollutants and precursors. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects.



## 5 POTENTIAL IMPACTS AND MITIGATION

### 5.1 Air Quality Analysis

#### **Threshold 5.1 Would the Project conflict with or obstruct implementation of the applicable air quality plan?**

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project site is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

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

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in [Table 8](#), [Table 9](#), and [Table 10](#) below, the Project would not exceed the construction standards and net emissions would not exceed operational standards with the implementation of mitigation measures. Therefore, the project would not contribute to an existing air quality violation. Thus, the Project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the UGP and therefore would not exceed the

population or job growth projections used by the SCAQMD to develop the AQMP. Thus, no impact would occur, as the Project is also consistent with the second criterion.

**Mitigation Measures:** Refer to Mitigation Measures AQ-1 through AQ-3.

**Level of Significance:** Less than significant impact with mitigation.

**Threshold 5.2** Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

### Construction Emissions

Construction associated with the proposed Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include ozone-precursor pollutants (i.e., ROG and NO<sub>x</sub>) and PM<sub>10</sub> and PM<sub>2.5</sub>. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

The duration of construction activities associated with the proposed Project is estimated to last approximately 7 months. Project construction would include site preparation, grading, paving, construction of buildings, and architectural coating. Site grading is anticipated to be mostly balanced with 431 cubic yards (CY) of soil export. Project construction requires concrete/industrial saws, rubber-tired dozers, and excavators during demolition; dozers and tractors/loaders/backhoes during site preparation; graders, rubber-tired dozers, excavators, and tractors/loaders/backhoes during grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, and paving equipment during paving; and air compressors during architectural coating. Emissions for each construction phase have been quantified based upon the phase durations and equipment types. Construction-generated emissions associated the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See [Appendix A](#) for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the proposed Project are summarized in in [Table 8: Construction-Related Emissions](#).

**Fugitive Dust Emissions.** Construction would require grading of the entire Project site during the initial phases. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill operations, demolition, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. Fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby.

SCAQMD Rules 402 and 403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. Mitigation Measure AQ-1 requires the implementation of Rule 402 and 403 dust control techniques to minimize PM<sub>10</sub> and PM<sub>2.5</sub> concentrations. The recommended mitigation measures would be required to ensure compliance with SCAQMD Rules and Regulations, which would be verified and enforced through the City's development review process.

Table 8: Construction-Related Emissions (Maximum Pounds Per Day)						
Construction Year	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO <sub>x</sub> )	Carbon Monoxide (CO)	Sulfur Dioxide (SO <sub>2</sub> )	Coarse Particulate Matter (PM <sub>10</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )
2020	52.22	85.20	61.70	0.19	11.56	6.32
SCAQMD Threshold	75	100	550	150	55	150
Exceed SCAQMD Threshold?	No	No	No	No	No	No
Notes: SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. The modeled emissions also includes the use of low VOC paints; refer to Mitigation Measure AQ-2. No mitigation was applied to construction equipment. Refer to Appendix A for Model Data Outputs.						
Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.						

**Construction Exhaust.** Exhaust emission factors for typical diesel-powered heavy equipment are based on the CalEEMod program defaults. Variables factored into estimating the total construction emissions include: level of activity, length of construction period, number of pieces/types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported onsite or offsite. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on site as the equipment is used, and emissions from trucks transporting materials and workers to and from the site.

**ROG Emissions.** In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O<sub>3</sub> precursors. ROG emissions from exhaust and architectural coatings were quantified in CalEEMod. The highest concentration of ROG emissions would be generated during the application of architectural coatings. As required by law, all architectural coatings for the Project structures would comply with SCAQMD Rule 1113. Rule 1113 provides specifications on painting practices and regulates the ROG content of paint. As indicated in [Table 8](#), Project construction would not exceed ROG thresholds with the implementation of Mitigation Measures AQ-2, which limits the VOC content of paint to 50 grams per liter or less. Compliance with AQ-2 would ensure that construction ROG emissions would not exceed SCAQMD thresholds.

**Total Daily Construction Emissions.** As shown in [Table 8](#), implementation of AQ-1 and AQ-2 would reduce construction emissions to a less than significant level.

### Operational Emissions

Project-generated emissions would be associated with motor vehicle use and area sources, such as the use of landscape maintenance equipment and architectural coatings. Long-term operational emissions attributable to the proposed Project are summarized in [Table 9: Long-Term Operational Emissions](#). Note

that emissions rates differ from summer to winter because weather factors are dependent on the season and these factors affect pollutant mixing, dispersion, ozone formation, and other factors.

<b>Table 9: Long-Term Operational Emissions (Maximum Pounds Per Day)</b>						
<b>Source</b>	<b>Reactive Organic Gases (ROG)</b>	<b>Nitrogen Oxide (NO<sub>x</sub>)</b>	<b>Carbon Monoxide (CO)</b>	<b>Sulfur Dioxide (SO<sub>2</sub>)</b>	<b>Coarse Particulate Matter (PM<sub>10</sub>)</b>	<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>
<b>Existing Gravel Processing Operations</b>						
Summer Emissions	4.87	46.60	32.14	0.08	2.42	2.07
Winter Emissions	4.87	48.61	31.92	0.08	2.43	2.07
<b>Proposed Project – Summer Emissions</b>						
Area Source Emissions	6.76	0.0	0.12	0.0	0.0	0.0
Energy Emissions	0.02	0.15	0.13	0.0	0.01	0.01
Mobile Emissions	8.31	70.32	94.69	0.32	22.16	6.37
Off-Road Emissions	1.73	15.57	14.16	0.02	1.16	1.07
<i>Total Emissions</i>	<i>16.81</i>	<i>86.05</i>	<i>109.10</i>	<i>0.34</i>	<i>23.33</i>	<i>7.44</i>
<b>Net Increase</b>	<b>11.94</b>	<b>39.45</b>	<b>76.96</b>	<b>0.26</b>	<b>20.91</b>	<b>5.37</b>
SCAQMD Threshold	55	55	550	150	150	55
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Proposed Project – Winter Emissions</b>						
Area Source Emissions	6.76	0.0	0.12	0.0	0.0	0.0
Energy Emissions	0.02	0.15	0.13	0.0	0.01	0.01
Mobile Emissions	7.72	72.98	85.97	0.30	22.16	6.37
Off-Road Emissions	1.73	15.57	25.16	0.02	1.16	1.07
<i>Total Emissions</i>	<i>16.22</i>	<i>88.70</i>	<i>100.38</i>	<i>0.32</i>	<i>23.33</i>	<i>7.45</i>
<b>Net Increase</b>	<b>11.35</b>	<b>40.09</b>	<b>68.46</b>	<b>0.24</b>	<b>20.9</b>	<b>5.38</b>
SCAQMD Threshold	55	55	550	150	150	55
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.						

The Project site is currently occupied with a sand and gravel processing plant. The sand and gravel processing plant uses eight pieces off-road heavy-duty diesel equipment, such as rubber tired loaders, stackers, static and mobile screens, cone and crushers, and water trucks. Additionally, the existing sand and gravel processing operations include approximately 78 trucks per day to off-haul materials processed on-site. Table 9 shows the existing emissions that are generated from the current on-site operations as well as the net increase in maximum daily emissions that would occur with implementation of the Project. As shown in Table 9, the Project's net emissions would not exceed SCAQMD operational thresholds.

**Area Source Emissions.** Area source emissions would be generated due to on-site equipment, architectural coating, consumer products, and landscaping that were previously not present on the site. As shown in Table 9, area source emissions from the proposed Project would not exceed SCAQMD thresholds for either the winter or summer seasons.

**Energy Source Emissions.** Energy source emissions would be generated due to electricity and natural gas usage associated with the proposed Project. Primary uses of electricity and natural gas by the Project would be for miscellaneous warehouse equipment, space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. As shown in [Table 9](#), energy source emissions from the proposed Project would not exceed SCAQMD thresholds for criteria pollutants.

**Mobile Source.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are all pollutants of regional concern. NO<sub>x</sub> and ROG react with sunlight to form O<sub>3</sub>, known as photochemical smog. Additionally, wind currents readily transport PM<sub>10</sub> and PM<sub>2.5</sub>. However, CO tends to be a localized pollutant, dispersing rapidly at the source. Project-generated vehicle emissions have been estimated based on the trip generation data within the Project traffic study. As indicated in the traffic study, the proposed Project would generate 2,483 total daily trips (2,583 passenger car equivalent trips). The fleet mix in CalEEMod has been adjusted to account for Project specific vehicle classifications.

**Conclusion.** As shown in [Table 9](#), the net operational emissions would not exceed the SCAQMD thresholds. Mitigation Measure AQ-3 includes best management practices to minimize operational mobile source emissions. Mitigation Measure AQ-3 requires buildings to include infrastructure to facilitate sufficient electric charging for trucks to plug in, electric vehicle charging stations, anti-idling signs, electric or natural gas-powered service equipment (e.g., forklifts, yard trucks/hostlers, etc.). The recommended mitigation measures would be required to ensure the Project's net emissions remain below SCAQMD thresholds, which would be verified and enforced through the City's site plan review process.

### Cumulative Short-Term Emissions

The SCAB is designated nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> for State standards and nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> for Federal standards. As discussed above, the Project construction-related emissions by themselves would not have the potential to exceed the SCAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether individual Project emissions have the potential to affect cumulative regional air quality, it can be expected that the Project-related construction emissions would not be cumulatively considerable. The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal Clean Air Act mandates. The analysis assumed fugitive dust controls would be utilized during construction, including frequent water applications. SCAQMD rules, mandates, and compliance with adopted AQMP emissions control measures would also be imposed on construction projects throughout the Air Basin, which would include related projects. Compliance with SCAQMD rules and regulations and implementation of Mitigation Measure AQ-1 and AQ-2 would reduce the proposed Project construction-related impacts to a less than significant level. Therefore, Project-related construction emissions, in combination with those from other projects in the area, would not substantially deteriorate the local air quality. Construction emissions associated with the proposed Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

### Cumulative Long-Term Impacts

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in [Table 9](#), the proposed Project's net operational emissions would not exceed SCAQMD thresholds. As a result, operational emissions associated with the proposed Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Adherence to SCAQMD rules and regulations would minimize potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Impacts would be less than significant in this regard.

### Mitigation Measures:

**AQ-1** Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

**AQ-2** The applicant shall require by contract specifications that the interior and exterior architectural coatings (paint and primer including parking lot paint) products used would have a volatile organic compound rating of 50 grams per liter or less. Contract specifications shall be included in the construction documents for the Project, which shall be reviewed and approved by the City of Upland prior to the issuance of building permits.



**AQ-3**

Prior to the issuance of a certificate of occupancy, the Project Applicant shall demonstrate to the satisfaction of the City of Upland Planning Division that the following measures would be implemented during Project operations.

- The proposed warehouses shall be constructed with the appropriate infrastructure to facilitate sufficient electric charging for trucks to plug in, in anticipation of future technology that allows trucks to operate partially on electricity.
- At least 6 percent of all vehicle parking spaces (including for trucks) shall include electric vehicle charging stations. Further, electrical hookups should be provided at the onsite truck stop for truckers to plug in any onboard auxiliary equipment. At a minimum, electrical panels should be appropriately sized to allow for future expanded use.
- Legible, durable, weatherproof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than 5 minutes; and (3) telephone numbers of the building facilities manager and CARB to report violations.
- All service equipment (e.g., forklifts, yard trucks, hostlers, etc.) used within the site shall be electric or powered by compressed natural gas.
- To promote alternative fuels and help support “clean” truck fleets, the developer/successor-in-interest shall provide building occupants with information related to the SCAQMD’s Carl Moyer Program, or other such programs that promote truck retrofits or “clean” vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of (1) alternatively fueled cargo handling equipment; (2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; (3) designated truck parking locations in the project vicinity; (4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and (5) the US Environmental Protection Agency’s SmartWay program.

**Level of Significance:** Less than significant impact with mitigation.

**Threshold 5.3 Would the Project expose sensitive receptors to substantial pollutant concentrations?****Localized Construction Significance Analysis**

The nearest sensitive receptors are the multi-family residences located 1,040 feet (317 meters) southeast of the Project site. To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold*

*Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. As discussed above, project construction includes concrete/industrial saws, rubber-tired dozers, and excavators during demolition; dozers and tractors/loaders/backhoes during site preparation; graders, rubber-tired dozers, excavators, and tractors/loaders/backhoes during grading; cranes, forklifts, generators, tractors, and welders during building construction. Table 10: Equipment-Specific Grading Rates, is used to determine the maximum daily disturbed acreage for comparison to LSTs. The appropriate SRA for the localized significance thresholds is the Northwest San Bernardino Valley area (SRA 32) since this area includes the Project site. LSTs apply to CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Project construction is anticipated to disturb a maximum of 6.5 acres in a single day. As the LST guidance provides thresholds for projects disturbing 1-, 2-, and 5-acres in size and the thresholds increase with size of the site, the LSTs for 5-acre threshold are conservatively utilized for this analysis.

<b>Table 10: Equipment-Specific Grading Rates</b>					
<b>Construction Phase</b>	<b>Equipment Type</b>	<b>Equipment Quantity</b>	<b>Acres Graded per 8-Hour Day</b>	<b>Operating Hours per Day</b>	<b>Acres Graded per Day</b>
Grading	Tractors	2	0.5	8	1
	Graders	2	0.5	8	1
	Dozers	1	0.5	8	0.5
	Scrapers	4	1	8	4
<b>Total Acres Graded per Day</b>					<b>6.5</b>
Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.					

The SCAQMD's methodology states that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The nearest sensitive receptors are the single-family residences located 1,040 feet (317 meters) southeast of the Project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 200 meters were conservatively utilized in this analysis. Table 11: Localized Significance of Construction Emissions, presents the results of localized emissions during construction. Table 11 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

Table 11: Localized Significance of Construction Emissions (Maximum Pounds Per Day)				
Construction Activity	Nitrogen Oxide (NO <sub>x</sub> )	Carbon Monoxide (CO)	Coarse Particulate Matter (PM <sub>10</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )
Site Preparation (2020)	42.42	21.51	9.92	6.27
Grading (2020)	84.85	55.23	9.02	4.97
Building Construction (2020)	19.19	16.85	1.12	1.05
Paving (2020)	14.07	14.65	0.75	0.69
Architectural Coating (2020)	3.37	3.66	0.22	0.22
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 200 meters)	486	9,611	140	45
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.

### Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). Since the proposed Project is a warehouse, the operational phase LST protocol is conservatively applied to both the area source and all the mobile source emissions. LSTs for receptors located at 200 meters for SRA 32 were conservatively utilized in this analysis because the closest receptors are over 300 meters away. Although the project is 50.25 acres, the 5-acre LST threshold was also conservatively for the Project, as the LSTs increase with the size of the site.

The LST analysis only includes on-site sources. However, the CalEEMod model outputs do not separate on- and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in [Table 12: Localized Significance of Operational Emissions](#), include all on-site Project-related stationary sources and 100 percent of the Project-related new mobile sources. This figure is conservative, considering only 5 percent of the Project-related new mobile sources would occur on-site<sup>2</sup>. [Table 12](#) shows that the maximum daily emissions of these pollutants during operations would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during operational activities.

Table 12: Localized Significance of Operational Emissions (Maximum Pounds Per Day)				
Activity	Nitrogen Oxide (NO <sub>x</sub> )	Carbon Monoxide (CO)	Coarse Particulate Matter (PM <sub>10</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )
On-Site and Mobile Source Emissions	88.70	100.38	23.33	7.45
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 200 meters)	486	9,611	34	11
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.

<sup>2</sup> South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, 2009.

## Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (*Sierra Club v. County of Fresno* [Friant Ranch, L.P.] [2018] Cal.5<sup>th</sup>, Case No. S219783).

As shown in [Table 11](#) and [Table 12](#), localized effects of on-site project emissions on nearby receptors were found to be less than significant. The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations such as asthmatics, children, and the elderly.

Additionally, the SCAQMD has set its CEQA regional significance thresholds for NO<sub>x</sub> and ROG (VOC) at 10 tons per year (expressed as 55 pounds per day) based on the FCAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the South Coast Air Basin) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program<sup>3</sup> was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

As shown above, Project-related emissions would not exceed the SCAQMD's LSTs or regional thresholds, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore, sensitive receptors would not be exposed to criteria pollutant levels in excess of the health-based ambient air quality standards.

## Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the proposed Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

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<sup>3</sup> Code of Federal Regulation (CFR) [i.e., PSD (40 CFR 52.21, 40 CFR 51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S)]

The Basin was re-designated as attainment in 2007 and is no longer addressed in the SCAQMD's AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The proposed Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 2,483 total daily trips (2,583 passenger car equivalent trips attributable to the Project). Therefore, impacts would be less than significant.

**Mitigation Measures:** No mitigation is required.

**Level of Significance:** Less than significant impact.

**Threshold 5.4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

The SCAQMD *CEQA Air Quality Handbook* identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, there would be no impacts from the proposed Project.

**Mitigation Measures:** No mitigation is required.

**Level of Significance:** No impact.

## 5.2 Cumulative Setting, Impacts, and Mitigation Measures

### Cumulative Setting

The cumulative setting for air quality includes the City of Upland and the SCAB. The SCAB is designated as a nonattainment area for state standards of ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAB is designated as a nonattainment area for federal standards of ozone and PM<sub>2.5</sub>, attainment and serious maintenance for federal PM<sub>10</sub> standards, and is designated as unclassified or attainment for all other pollutants. Cumulative growth in population and vehicle use could inhibit efforts to improve regional air quality and attain the ambient air quality standards.

### Cumulative Impacts and Mitigation Measures

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with requirements of the FCAA and CCAA. As discussed above, the proposed Project would be consistent with the AQMP, which is intended to bring the SCAB into attainment for all criteria pollutants. As discussed above, the proposed Project operational emissions would not exceed SCAQMD thresholds with the implementation of Mitigation Measures AQ-1 through

AQ-3. Therefore, the proposed Project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Adherence to SCAQMD rules and regulations would minimize potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Impacts would be less than significant in this regard.

**Mitigation Measures:** Refer to Mitigation Measures AQ-1 through AQ-3.

**Level of Significance:** Less than significant impact with mitigation.



## 6 REFERENCES

1. California Air Pollution Control Officers Association (CAPCOA), *Health Effects*, 2018.
2. California Air Pollution Control Officers Association (CAPCOA), *Health Risk Assessments for Proposed Land Use Projects*, 2009.
3. California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM) Top Four Summaries from 2014 to 2016*, 2018.
4. California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, 2005.
5. California Air Resources Board, *Current Air Quality Standards*, 2016.
6. California Air Resources Board, *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, 2000.
7. Federal Highway Administration, *Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*, 2016.
8. Herdman Architecture and Design, *Site Plan*, 2019.
9. Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, 2015.
10. Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy*, 2016.
11. South Coast Air Quality Management District, *Air Quality Management Plan*, 2016.
12. South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993.
13. South Coast Air Quality Management District, *Localized Significance Threshold Methodology*, 2009.
14. South Coast Air Quality Management District, *High-Cube Warehouse Vehicle Trip Generation Analysis*, 2016.
15. Translutions, Inc., *Foothill Boulevard Warehouse Traffic Impact Analysis*, October 2019.
16. United States Environmental Protection Agency, *National Ambient Air Quality Standards Table*, 2016.
17. United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants*, 2018.
18. United States Environmental Protection Agency, *Policy Assessment for the Review of the Lead National Ambient Air Quality Standards*, 2013.

## Appendix A

### Air Quality Modeling Data

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Bridge Point Upland - San Bernardino-South Coast County, Summer

**Bridge Point Upland**  
**San Bernardino-South Coast County, Summer**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	266.82	1000sqft	6.13	266,825.00	0
Parking Lot	861.05	1000sqft	19.77	1,306,800.00	0
Regional Shopping Center	10.00	1000sqft	0.23	10,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<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 - 266.8 kSF buildings, 6.53 acres (284 KSF) landscaping, 1,306,800 KSF parking

Construction Phase - anticipated construction schedule

Off-road Equipment - anticipated construction equipment

Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Off-road Equipment - anticipated construction equipment

Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Trips and VMT - Export site is less 1 mile from project site

Demolition -

Grading - Anticipated export

Architectural Coating - low VOC paint mitigation

Vehicle Trips - trip rates from Translutions trip generation report using High Cube Warehouse

Construction Off-road Equipment Mitigation - mitigation per Rule 403

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - anticipated operational equipment

Fleet Mix - Fleet mix from Translutions Traffic Study

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	NumDays	45.00	35.00
tblConstructionPhase	NumDays	440.00	105.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	PhaseEndDate	3/13/2020	1/31/2020
tblConstructionPhase	PhaseEndDate	4/10/2020	2/4/2020
tblConstructionPhase	PhaseEndDate	6/12/2020	3/24/2020
tblConstructionPhase	PhaseEndDate	2/18/2022	8/18/2020
tblConstructionPhase	PhaseEndDate	5/27/2022	8/31/2020
tblConstructionPhase	PhaseEndDate	4/8/2022	9/1/2020
tblConstructionPhase	PhaseStartDate	3/14/2020	2/1/2020

tblConstructionPhase	PhaseStartDate	4/11/2020	2/5/2020
tblConstructionPhase	PhaseStartDate	6/13/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	4/9/2022	6/1/2020
tblConstructionPhase	PhaseStartDate	2/19/2022	8/19/2020
tblFleetMix	HHD	0.06	0.02
tblFleetMix	LDA	0.55	0.23
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.38
tblFleetMix	LHD2	5.2670e-003	5.4600e-003
tblFleetMix	MCY	6.0000e-003	6.1170e-003
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblGrading	AcresOfGrading	175.00	225.00
tblGrading	MaterialExported	0.00	431.00
tblLandUse	LandUseSquareFeet	266,820.00	266,825.00
tblLandUse	LandUseSquareFeet	861,050.00	1,306,800.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	12.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	WorkerTripNumber	33.00	20.00
tblVehicleTrips	ST_TR	49.97	7.75

tblVehicleTrips	ST_TR	1.68	7.94
tblVehicleTrips	SU_TR	25.24	7.75
tblVehicleTrips	SU_TR	1.68	7.94
tblVehicleTrips	WD_TR	42.70	7.75
tblVehicleTrips	WD_TR	1.68	7.94

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	52.2162	85.1995	61.7018	0.1939	18.2675	3.5286	20.4662	9.9840	3.2464	12.0069	0.0000	19,561.3656	19,561.3656	3.4353	0.0000	19,596.9796
Maximum	52.2162	85.1995	61.7018	0.1939	18.2675	3.5286	20.4662	9.9840	3.2464	12.0069	0.0000	19,561.3656	19,561.3656	3.4353	0.0000	19,596.9796

#### 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					
2020	52.2162	85.1995	61.7018	0.1939	10.0380	3.5286	11.5615	4.2962	3.2464	6.3190	0.0000	19,561.3656	19,561.3656	3.4353	0.0000	19,596.9795
Maximum	52.2162	85.1995	61.7018	0.1939	10.0380	3.5286	11.5615	4.2962	3.2464	6.3190	0.0000	19,561.3656	19,561.3656	3.4353	0.0000	19,596.9795



	ROG	NOx	CO	SO2	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	45.05	0.00	43.51	56.97	0.00	47.37	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Energy	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221
Mobile	7.2707	62.2075	81.9423	0.2926	20.3490	0.4165	20.7655	5.5506	0.3956	5.9461		29,647.7521	29,647.7521	1.0240		29,673.3518
Offroad	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328
Total	15.5968	76.5096	96.2004	0.3119	20.3490	1.4328	21.7817	5.5506	1.3315	6.8821		31,606.1132	31,606.1132	1.6026	3.3300e-003	31,647.1722

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Energy	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221

Mobile	7.2707	62.2075	81.9423	0.2926	20.3490	0.4165	20.7655	5.5506	0.3956	5.9461		29,647.75 21	29,647.752 1	1.0240		29,673.35 18
Offroad	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.370 0	1,776.3700	0.5745		1,790.732 8
<b>Total</b>	<b>15.5968</b>	<b>76.5096</b>	<b>96.2004</b>	<b>0.3119</b>	<b>20.3490</b>	<b>1.4328</b>	<b>21.7817</b>	<b>5.5506</b>	<b>1.3315</b>	<b>6.8821</b>		<b>31,606.11 32</b>	<b>31,606.113 2</b>	<b>1.6026</b>	<b>3.3300e- 003</b>	<b>31,647.17 22</b>

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2020	1/31/2020	5	0	
2	Site Preparation	Site Preparation	2/1/2020	2/4/2020	5	2	
3	Grading	Grading	2/5/2020	3/24/2020	5	35	
4	Building Construction	Building Construction	3/25/2020	8/18/2020	5	105	
5	Paving	Paving	8/19/2020	9/1/2020	5	10	
6	Architectural Coating	Architectural Coating	6/1/2020	8/31/2020	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 19.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 415,238; Non-Residential Outdoor: 138,413; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	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	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	2	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	20.00	0.00	54.00	14.70	6.90	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	664.00	260.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	133.00	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

- Replace Ground Cover
- Water Exposed Area

## Clean Paved Roads

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

[illegible]

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.3 Site Preparation - 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
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Category	lb/day										lb/day				
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000		0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918	3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>	<b>3,714.8975</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	0.0982	0.0631	0.8095	2.0400e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		203.4151	203.4151	6.2100e-003		203.5704
<b>Total</b>	<b>0.0982</b>	<b>0.0631</b>	<b>0.8095</b>	<b>2.0400e-003</b>	<b>0.2012</b>	<b>1.3200e-003</b>	<b>0.2025</b>	<b>0.0534</b>	<b>1.2100e-003</b>	<b>0.0546</b>		<b>203.4151</b>	<b>203.4151</b>	<b>6.2100e-003</b>		<b>203.5704</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					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975



Total	4.0765	42.4173	21.5136	0.0380	7.7233	2.1974	9.9207	4.2454	2.0216	6.2670	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
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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	0.0982	0.0631	0.8095	2.0400e-003	0.1907	1.3200e-003	0.1920	0.0508	1.2100e-003	0.0520		203.4151	203.4151	6.2100e-003		203.5704
Total	0.0982	0.0631	0.8095	2.0400e-003	0.1907	1.3200e-003	0.1920	0.0508	1.2100e-003	0.0520		203.4151	203.4151	6.2100e-003		203.5704

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.8410	0.0000	12.8410	4.0466	0.0000	4.0466			0.0000			0.0000
Off-Road	7.4017	84.8525	55.2256	0.1093		3.5266	3.5266		3.2445	3.2445		10,582.8510	10,582.8510	3.4227		10,668.4187
Total	7.4017	84.8525	55.2256	0.1093	12.8410	3.5266	16.3676	4.0466	3.2445	7.2910		10,582.8510	10,582.8510	3.4227		10,668.4187

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	6.4400e-003	0.2769	0.0360	7.3000e-004	0.0135	5.9000e-004	0.0141	3.7100e-003	5.7000e-004	4.2800e-003		77.1877	77.1877	5.7000e-003		77.3303
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	0.1156	0.3470	0.9355	3.0000e-003	0.2371	2.0500e-003	0.2391	0.0630	1.9200e-003	0.0649		303.2046	303.2046	0.0126		303.5196

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					5.4895	0.0000	5.4895	1.7299	0.0000	1.7299			0.0000			0.0000
Off-Road	7.4017	84.8525	55.2256	0.1093		3.5266	3.5266		3.2445	3.2445	0.0000	10,582.8510	10,582.8510	3.4227		10,668.4187
Total	7.4017	84.8525	55.2256	0.1093	5.4895	3.5266	9.0161	1.7299	3.2445	4.9744	0.0000	10,582.8510	10,582.8510	3.4227		10,668.4187

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	6.4400e-003	0.2769	0.0360	7.3000e-004	0.0129	5.9000e-004	0.0135	3.5600e-003	5.7000e-004	4.1300e-003		77.1877	77.1877	5.7000e-003		77.3303
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2119	1.4600e-003	0.2134	0.0564	1.3500e-003	0.0578		226.0168	226.0168	6.9000e-003		226.1893
<b>Total</b>	<b>0.1156</b>	<b>0.3470</b>	<b>0.9355</b>	<b>3.0000e-003</b>	<b>0.2248</b>	<b>2.0500e-003</b>	<b>0.2269</b>	<b>0.0600</b>	<b>1.9200e-003</b>	<b>0.0619</b>		<b>303.2046</b>	<b>303.2046</b>	<b>0.0126</b>		<b>303.5196</b>

### 3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</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	0.7893	27.4375	5.3472	0.0705	1.6653	0.1263	1.7915	0.4795	0.1208	0.6003		7,438.6360	7,438.6360	0.4832		7,450.7151
Worker	3.6240	2.3259	29.8619	0.0754	7.4220	0.0486	7.4706	1.9683	0.0448	2.0131		7,503.7586	7,503.7586	0.2291		7,509.4854

Total	4.4133	29.7633	35.2091	0.1459	9.0872	0.1749	9.2621	2.4478	0.1656	2.6134		14,942.3946	14,942.3946	0.7122		14,960.2005
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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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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	0.7893	27.4375	5.3472	0.0705	1.5941	0.1263	1.7204	0.4620	0.1208	0.5828		7,438.6360	7,438.6360	0.4832		7,450.7151
Worker	3.6240	2.3259	29.8619	0.0754	7.0348	0.0486	7.0834	1.8733	0.0448	1.9181		7,503.7586	7,503.7586	0.2291		7,509.4854
Total	4.4133	29.7633	35.2091	0.1459	8.6289	0.1749	8.8038	2.3353	0.1656	2.5009		14,942.3946	14,942.3946	0.7122		14,960.2005

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	5.1797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>6.5363</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</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	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
<b>Total</b>	<b>0.0819</b>	<b>0.0525</b>	<b>0.6746</b>	<b>1.7000e-003</b>	<b>0.1677</b>	<b>1.1000e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0100e-003</b>	<b>0.0455</b>		<b>169.5126</b>	<b>169.5126</b>	<b>5.1700e-003</b>		<b>169.6420</b>

Mitigated Construction On-Site

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

Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	5.1797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>6.5363</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</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	0.0819	0.0525	0.6746	1.7000e-003	0.1589	1.1000e-003	0.1600	0.0423	1.0100e-003	0.0433		169.5126	169.5126	5.1700e-003		169.6420
<b>Total</b>	<b>0.0819</b>	<b>0.0525</b>	<b>0.6746</b>	<b>1.7000e-003</b>	<b>0.1589</b>	<b>1.1000e-003</b>	<b>0.1600</b>	<b>0.0423</b>	<b>1.0100e-003</b>	<b>0.0433</b>		<b>169.5126</b>	<b>169.5126</b>	<b>5.1700e-003</b>		<b>169.6420</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.3878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
<b>Total</b>	<b>44.8721</b>	<b>3.3677</b>	<b>3.6628</b>	<b>5.9400e-003</b>		<b>0.2219</b>	<b>0.2219</b>		<b>0.2219</b>	<b>0.2219</b>		<b>562.8961</b>	<b>562.8961</b>	<b>0.0436</b>		<b>563.9856</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	0.7259	0.4659	5.9814	0.0151	1.4866	9.7400e-003	1.4964	0.3943	8.9700e-003	0.4032		1,503.0119	1,503.0119	0.0459		1,504.1590
Total	0.7259	0.4659	5.9814	0.0151	1.4866	9.7400e-003	1.4964	0.3943	8.9700e-003	0.4032		1,503.0119	1,503.0119	0.0459		1,504.1590

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	44.3878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	44.8721	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856

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	0.7259	0.4659	5.9814	0.0151	1.4091	9.7400e-003	1.4188	0.3752	8.9700e-003	0.3842		1,503.0119	1,503.0119	0.0459		1,504.1590
Total	0.7259	0.4659	5.9814	0.0151	1.4091	9.7400e-003	1.4188	0.3752	8.9700e-003	0.3842		1,503.0119	1,503.0119	0.0459		1,504.1590

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.2707	62.2075	81.9423	0.2926	20.3490	0.4165	20.7655	5.5506	0.3956	5.9461		29,647.7521	29,647.7521	1.0240		29,673.3518
Unmitigated	7.2707	62.2075	81.9423	0.2926	20.3490	0.4165	20.7655	5.5506	0.3956	5.9461		29,647.7521	29,647.7521	1.0240		29,673.3518

#### 4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	77.50	77.50	77.50	167,620	167,620
Unrefrigerated Warehouse-No Rail	2,118.55	2,118.55	2118.55	9,079,509	9,079,509

Total	2,196.05	2,196.05	2,196.05	9,247,129	9,247,129
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4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Regional Shopping Center	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.227299	0.037976	0.179086	0.122965	0.380000	0.005460	0.017497	0.023600	0.000000	0.000000	0.006117	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221
NaturalGas Unmitigated	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	60.8219	6.6000e-004	5.9600e-003	5.0100e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.1555	7.1555	1.4000e-004	1.3000e-004	7.1980
Unrefrigerated Warehouse-No Pail	1483.99	0.0160	0.1455	0.1222	8.7000e-004		0.0111	0.0111		0.0111	0.0111		174.5865	174.5865	3.3500e-003	3.2000e-003	175.6240
Total		0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4900e-003	3.3300e-003	182.8221

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0608219	6.6000e-004	5.9600e-003	5.0100e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.1555	7.1555	1.4000e-004	1.3000e-004	7.1980
Unrefrigerated Warehouse-No Pail	1.48399	0.0160	0.1455	0.1222	8.7000e-004		0.0111	0.0111		0.0111	0.0111		174.5865	174.5865	3.3500e-003	3.2000e-003	175.6240
Total		0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4900e-003	3.3300e-003	182.8221

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	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Unmitigated	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

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	0.8026					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9440					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0109	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Total	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

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
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SubCategory	lb/day										lb/day					
Architectural Coating	0.8026					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9440					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0109	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Total	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	12	8.00	260	89	0.20	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328
Total	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328

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

Bridge Point Upland - San Bernardino-South Coast County, Winter

**Bridge Point Upland**  
**San Bernardino-South Coast County, Winter**

**1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	266.82	1000sqft	6.13	266,825.00	0
Parking Lot	861.05	1000sqft	19.77	1,306,800.00	0
Regional Shopping Center	10.00	1000sqft	0.23	10,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2021
<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 - 266.8 kSF buildings, 6.53 acres (284 KSF) landscaping, 1,306,800 KSF parking

Construction Phase - anticipated construction schedule

Off-road Equipment - anticipated construction equipment

Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Off-road Equipment - anticipated construction equipment



Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Trips and VMT - Export site is less 1 mile from project site

Demolition -

Grading - Anticipated export

Architectural Coating - low VOC paint mitigation

Vehicle Trips - trip rates from Translutions trip generation report using High Cube Warehouse

Construction Off-road Equipment Mitigation - mitigation per Rule 403

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - anticipated operational equipment

Fleet Mix - Fleet mix from Translutions Traffic Study

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	0.00
tblConstructionPhase	NumDays	20.00	2.00
tblConstructionPhase	NumDays	45.00	35.00
tblConstructionPhase	NumDays	440.00	105.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	NumDays	35.00	10.00
tblConstructionPhase	PhaseEndDate	3/13/2020	1/31/2020
tblConstructionPhase	PhaseEndDate	4/10/2020	2/4/2020
tblConstructionPhase	PhaseEndDate	6/12/2020	3/24/2020
tblConstructionPhase	PhaseEndDate	2/18/2022	8/18/2020
tblConstructionPhase	PhaseEndDate	5/27/2022	8/31/2020
tblConstructionPhase	PhaseEndDate	4/8/2022	9/1/2020
tblConstructionPhase	PhaseStartDate	3/14/2020	2/1/2020

tblConstructionPhase	PhaseStartDate	4/11/2020	2/5/2020
tblConstructionPhase	PhaseStartDate	6/13/2020	3/25/2020
tblConstructionPhase	PhaseStartDate	4/9/2022	6/1/2020
tblConstructionPhase	PhaseStartDate	2/19/2022	8/19/2020
tblFleetMix	HHD	0.06	0.02
tblFleetMix	LDA	0.55	0.23
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.18
tblFleetMix	LHD1	0.02	0.38
tblFleetMix	LHD2	5.2670e-003	5.4600e-003
tblFleetMix	MCY	6.0000e-003	6.1170e-003
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblGrading	AcresOfGrading	175.00	225.00
tblGrading	MaterialExported	0.00	431.00
tblLandUse	LandUseSquareFeet	266,820.00	266,825.00
tblLandUse	LandUseSquareFeet	861,050.00	1,306,800.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	12.00
tblTripsAndVMT	HaulingTripLength	20.00	10.00
tblTripsAndVMT	WorkerTripNumber	33.00	20.00
tblVehicleTrips	ST_TR	49.97	7.75

tblVehicleTrips	ST_TR	1.68	7.94
tblVehicleTrips	SU_TR	25.24	7.75
tblVehicleTrips	SU_TR	1.68	7.94
tblVehicleTrips	WD_TR	42.70	7.75
tblVehicleTrips	WD_TR	1.68	7.94

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	52.2166	85.2004	56.1678	0.1818	18.2675	3.5287	20.4662	9.9840	3.2464	12.0069	0.0000	18,345.5478	18,345.5478	3.4351	0.0000	18,381.5937
Maximum	52.2166	85.2004	56.1678	0.1818	18.2675	3.5287	20.4662	9.9840	3.2464	12.0069	0.0000	18,345.5478	18,345.5478	3.4351	0.0000	18,381.5937

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					
2020	52.2166	85.2004	56.1678	0.1818	10.0380	3.5287	11.5631	4.2962	3.2464	6.3190	0.0000	18,345.5478	18,345.5478	3.4351	0.0000	18,381.5937
Maximum	52.2166	85.2004	56.1678	0.1818	10.0380	3.5287	11.5631	4.2962	3.2464	6.3190	0.0000	18,345.5478	18,345.5478	3.4351	0.0000	18,381.5937

	ROG	NOx	CO	SO2	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	45.05	0.00	43.50	56.97	0.00	47.37	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Energy	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221
Mobile	6.7916	64.6786	74.4005	0.2787	20.3490	0.4170	20.7660	5.5506	0.3960	5.9466		28,263.3903	28,263.3903	1.0034		28,288.4754
Offroad	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328
Total	15.1177	78.9806	88.6585	0.2980	20.3490	1.4333	21.7822	5.5506	1.3320	6.8826		30,221.7513	30,221.7513	1.5821	3.3300e-003	30,262.2958

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Energy	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221

Mobile	6.7916	64.6786	74.4005	0.2787	20.3490	0.4170	20.7660	5.5506	0.3960	5.9466		28,263.3903	28,263.3903	1.0034		28,288.4754
Offroad	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328
<b>Total</b>	<b>15.1177</b>	<b>78.9806</b>	<b>88.6585</b>	<b>0.2980</b>	<b>20.3490</b>	<b>1.4333</b>	<b>21.7822</b>	<b>5.5506</b>	<b>1.3320</b>	<b>6.8826</b>		<b>30,221.7513</b>	<b>30,221.7513</b>	<b>1.5821</b>	<b>3.3300e-003</b>	<b>30,262.2958</b>

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2020	1/31/2020	5	0	
2	Site Preparation	Site Preparation	2/1/2020	2/4/2020	5	2	
3	Grading	Grading	2/5/2020	3/24/2020	5	35	
4	Building Construction	Building Construction	3/25/2020	8/18/2020	5	105	
5	Paving	Paving	8/19/2020	9/1/2020	5	10	
6	Architectural Coating	Architectural Coating	6/1/2020	8/31/2020	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 19.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 415,238; Non-Residential Outdoor: 138,413; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	1	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	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	2	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

### **Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	20.00	0.00	54.00	14.70	6.90	10.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	664.00	260.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	133.00	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**

Replace Ground Cover

Water Exposed Area

## Clean Paved Roads

### Unmitigated Construction On-Site

[illegible]

### Unmitigated Construction Off-Site

[illegible]



Mitigated Construction On-Site

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

Mitigated Construction Off-Site

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

3.3 Site Preparation - 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
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Category	lb/day										lb/day				
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000		0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918	3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>	<b>3,714.8975</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	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112
Total	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Total	4.0765	42.4173	21.5136	0.0380	7.7233	2.1974	9.9207	4.2454	2.0216	6.2670	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
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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	0.0983	0.0663	0.6653	1.8300e-003	0.1907	1.3200e-003	0.1920	0.0508	1.2100e-003	0.0520		182.4750	182.4750	5.4500e-003		182.6112
Total	0.0983	0.0663	0.6653	1.8300e-003	0.1907	1.3200e-003	0.1920	0.0508	1.2100e-003	0.0520		182.4750	182.4750	5.4500e-003		182.6112

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.8410	0.0000	12.8410	4.0466	0.0000	4.0466			0.0000			0.0000
Off-Road	7.4017	84.8525	55.2256	0.1093		3.5266	3.5266		3.2445	3.2445		10,582.8510	10,582.8510	3.4227		10,668.4187
Total	7.4017	84.8525	55.2256	0.1093	12.8410	3.5266	16.3676	4.0466	3.2445	7.2910		10,582.8510	10,582.8510	3.4227		10,668.4187

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	6.8800e-003	0.2742	0.0442	7.0000e-004	0.0135	6.1000e-004	0.0141	3.7100e-003	5.8000e-004	4.2900e-003		73.8378	73.8378	6.2900e-003		73.9952
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	0.1161	0.3479	0.7835	2.7400e-003	0.2371	2.0700e-003	0.2392	0.0630	1.9300e-003	0.0649		276.5878	276.5878	0.0123		276.8965

**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					5.4895	0.0000	5.4895	1.7299	0.0000	1.7299			0.0000			0.0000
Off-Road	7.4017	84.8525	55.2256	0.1093		3.5266	3.5266		3.2445	3.2445	0.0000	10,582.8510	10,582.8510	3.4227		10,668.4187
Total	7.4017	84.8525	55.2256	0.1093	5.4895	3.5266	9.0161	1.7299	3.2445	4.9744	0.0000	10,582.8510	10,582.8510	3.4227		10,668.4187

**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	6.8800e-003	0.2742	0.0442	7.0000e-004	0.0129	6.1000e-004	0.0135	3.5600e-003	5.8000e-004	4.1400e-003		73.8378	73.8378	6.2900e-003		73.9952
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2119	1.4600e-003	0.2134	0.0564	1.3500e-003	0.0578		202.7500	202.7500	6.0500e-003		202.9013
<b>Total</b>	<b>0.1161</b>	<b>0.3479</b>	<b>0.7835</b>	<b>2.7400e-003</b>	<b>0.2248</b>	<b>2.0700e-003</b>	<b>0.2269</b>	<b>0.0600</b>	<b>1.9300e-003</b>	<b>0.0619</b>		<b>276.5878</b>	<b>276.5878</b>	<b>0.0123</b>		<b>276.8965</b>

### 3.5 Building Construction - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</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	0.8324	27.2149	6.1975	0.0678	1.6653	0.1279	1.7931	0.4795	0.1223	0.6018		7,150.0028	7,150.0028	0.5342		7,163.3579
Worker	3.6259	2.4474	24.5430	0.0676	7.4220	0.0486	7.4706	1.9683	0.0448	2.0131		6,731.2986	6,731.2986	0.2010		6,736.3223

Total	4.4584	29.6623	30.7405	0.1354	9.0872	0.1765	9.2637	2.4478	0.1671	2.6149		13,881.3014	13,881.3014	0.7352		13,899.6801
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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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

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	0.8324	27.2149	6.1975	0.0678	1.5941	0.1279	1.7220	0.4620	0.1223	0.5843		7,150.0028	7,150.0028	0.5342		7,163.3579
Worker	3.6259	2.4474	24.5430	0.0676	7.0348	0.0486	7.0834	1.8733	0.0448	1.9181		6,731.2986	6,731.2986	0.2010		6,736.3223
Total	4.4584	29.6623	30.7405	0.1354	8.6289	0.1765	8.8054	2.3353	0.1671	2.5024		13,881.3014	13,881.3014	0.7352		13,899.6801

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	5.1797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>6.5363</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</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	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
<b>Total</b>	<b>0.0819</b>	<b>0.0553</b>	<b>0.5544</b>	<b>1.5300e-003</b>	<b>0.1677</b>	<b>1.1000e-003</b>	<b>0.1688</b>	<b>0.0445</b>	<b>1.0100e-003</b>	<b>0.0455</b>		<b>152.0625</b>	<b>152.0625</b>	<b>4.5400e-003</b>		<b>152.1760</b>

Mitigated Construction On-Site

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

Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	5.1797					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>6.5363</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</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	0.0819	0.0553	0.5544	1.5300e-003	0.1589	1.1000e-003	0.1600	0.0423	1.0100e-003	0.0433		152.0625	152.0625	4.5400e-003		152.1760
<b>Total</b>	<b>0.0819</b>	<b>0.0553</b>	<b>0.5544</b>	<b>1.5300e-003</b>	<b>0.1589</b>	<b>1.1000e-003</b>	<b>0.1600</b>	<b>0.0423</b>	<b>1.0100e-003</b>	<b>0.0433</b>		<b>152.0625</b>	<b>152.0625</b>	<b>4.5400e-003</b>		<b>152.1760</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.3878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219		562.8961	562.8961	0.0436		563.9856
<b>Total</b>	<b>44.8721</b>	<b>3.3677</b>	<b>3.6628</b>	<b>5.9400e-003</b>		<b>0.2219</b>	<b>0.2219</b>		<b>0.2219</b>	<b>0.2219</b>		<b>562.8961</b>	<b>562.8961</b>	<b>0.0436</b>		<b>563.9856</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	0.7263	0.4902	4.9160	0.0135	1.4866	9.7400e-003	1.4964	0.3943	8.9700e-003	0.4032		1,348.2872	1,348.2872	0.0403		1,349.2935
Total	0.7263	0.4902	4.9160	0.0135	1.4866	9.7400e-003	1.4964	0.3943	8.9700e-003	0.4032		1,348.2872	1,348.2872	0.0403		1,349.2935

**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	44.3878					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.4844	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856
Total	44.8721	3.3677	3.6628	5.9400e-003		0.2219	0.2219		0.2219	0.2219	0.0000	562.8961	562.8961	0.0436		563.9856

**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	0.7263	0.4902	4.9160	0.0135	1.4091	9.7400e-003	1.4188	0.3752	8.9700e-003	0.3842		1,348.2872	1,348.2872	0.0403		1,349.2935
Total	0.7263	0.4902	4.9160	0.0135	1.4091	9.7400e-003	1.4188	0.3752	8.9700e-003	0.3842		1,348.2872	1,348.2872	0.0403		1,349.2935

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7916	64.6786	74.4005	0.2787	20.3490	0.4170	20.7660	5.5506	0.3960	5.9466		28,263.3903	28,263.3903	1.0034		28,288.4754
Unmitigated	6.7916	64.6786	74.4005	0.2787	20.3490	0.4170	20.7660	5.5506	0.3960	5.9466		28,263.3903	28,263.3903	1.0034		28,288.4754

#### 4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	77.50	77.50	77.50	167,620	167,620
Unrefrigerated Warehouse-No Rail	2,118.55	2,118.55	2118.55	9,079,509	9,079,509

Total	2,196.05	2,196.05	2,196.05	9,247,129	9,247,129
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4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Regional Shopping Center	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.227299	0.037976	0.179086	0.122965	0.380000	0.005460	0.017497	0.023600	0.000000	0.000000	0.006117	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221
NaturalGas Unmitigated	0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4800e-003	3.3300e-003	182.8221

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	60.8219	6.6000e-004	5.9600e-003	5.0100e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.1555	7.1555	1.4000e-004	1.3000e-004	7.1980
Unrefrigerated Warehouse-No Pail	1483.99	0.0160	0.1455	0.1222	8.7000e-004		0.0111	0.0111		0.0111	0.0111		174.5865	174.5865	3.3500e-003	3.2000e-003	175.6240
Total		0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4900e-003	3.3300e-003	182.8221

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.0608219	6.6000e-004	5.9600e-003	5.0100e-003	4.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004		7.1555	7.1555	1.4000e-004	1.3000e-004	7.1980
Unrefrigerated Warehouse-No Pail	1.48399	0.0160	0.1455	0.1222	8.7000e-004		0.0111	0.0111		0.0111	0.0111		174.5865	174.5865	3.3500e-003	3.2000e-003	175.6240
Total		0.0167	0.1515	0.1272	9.1000e-004		0.0115	0.0115		0.0115	0.0115		181.7421	181.7421	3.4900e-003	3.3300e-003	182.8221

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	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Unmitigated	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

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	0.8026					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9440					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0109	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Total	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

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
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SubCategory	lb/day										lb/day					
Architectural Coating	0.8026					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9440					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0109	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656
Total	6.7575	1.0700e-003	0.1166	1.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		0.2490	0.2490	6.6000e-004		0.2656

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	12	8.00	260	89	0.20	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328
Total	1.5519	14.1495	14.0142	0.0183		1.0044	1.0044		0.9240	0.9240		1,776.3700	1,776.3700	0.5745		1,790.7328

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

Bridge Point Upland - Existing Rock Crushing - San Bernardino-South Coast County, Summer

## Bridge Point Upland - Existing Rock Crushing

### San Bernardino-South Coast County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	40.00	User Defined Unit	40.00	0.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2019
<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

Project Characteristics -

Land Use - Rock crushing on approx. 40 acre site

Construction Phase - current operation

Off-road Equipment - current-onsite equipment, cone, jaw, screen, loaders, stackers, water trucks

Grading - Approximately 78 trucks per day

Trips and VMT - approximately 78 trucks per day

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	75.00	261.00
tblConstructionPhase	PhaseEndDate	5/24/2019	12/31/2019
tblConstructionPhase	PhaseStartDate	2/11/2019	1/1/2019
tblGrading	MaterialExported	0.00	624.00
tblLandUse	LotAcreage	0.00	40.00
tblOffRoadEquipment	HorsePower	168.00	350.00
tblOffRoadEquipment	HorsePower	168.00	300.00
tblOffRoadEquipment	HorsePower	168.00	100.00
tblOffRoadEquipment	HorsePower	203.00	375.00
tblOffRoadEquipment	HorsePower	203.00	300.00
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
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

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8738	48.6047	32.1412	0.0767	0.2849	2.1455	2.4304	0.0756	1.9964	2.0720	0.0000	7,562.6253	7,562.6253	2.1472	0.0000	7,616.3057
Maximum	4.8738	48.6047	32.1412	0.0767	0.2849	2.1455	2.4304	0.0756	1.9964	2.0720	0.0000	7,562.6253	7,562.6253	2.1472	0.0000	7,616.3057

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8738	48.6047	32.1412	0.0767	0.2700	2.1455	2.4155	0.0719	1.9964	2.0683	0.0000	7,562.6253	7,562.6253	2.1472	0.0000	7,616.3057
Maximum	4.8738	48.6047	32.1412	0.0767	0.2700	2.1455	2.4155	0.0719	1.9964	2.0683	0.0000	7,562.6253	7,562.6253	2.1472	0.0000	7,616.3057

	ROG	NOx	CO	SO2	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	5.25	0.00	0.62	4.83	0.00	0.18	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	1/1/2019	12/31/2019	5	261	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Other Material Handling Equipment	1	8.00	350	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Other Material Handling Equipment	1	8.00	300	0.40
Grading	Other Material Handling Equipment	3	8.00	100	0.40
Grading	Rubber Tired Loaders	1	8.00	375	0.36
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rubber Tired Loaders	1	8.00	300	0.36
Grading	Off-Highway Trucks	2	4.00	402	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	10	25.00	0.00	78.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 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					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005			0.0000			0.0000
Off-Road	4.7236	48.4272	30.8835	0.0735		2.1434	2.1434		1.9944	1.9944		7,245.8804	7,245.8804	2.1361		7,299.2819
Total	4.7236	48.4272	30.8835	0.0735	2.7000e-004	2.1434	2.1436	4.0000e-005	1.9944	1.9945		7,245.8804	7,245.8804	2.1361		7,299.2819

#### 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	2.0000e-003	0.0789	0.0114	2.4000e-004	5.2300e-003	2.6000e-004	5.5000e-003	1.4300e-003	2.5000e-004	1.6900e-003		25.1409	25.1409	1.3800e-003		25.1754
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1482	0.0986	1.2462	2.9300e-003	0.2794	1.8800e-003	0.2813	0.0741	1.7300e-003	0.0758		291.6040	291.6040	9.7800e-003		291.8484

Total	0.1502	0.1775	1.2576	3.1700e-003	0.2847	2.1400e-003	0.2868	0.0755	1.9800e-003	0.0775		316.7449	316.7449	0.0112		317.0238
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	2.0000e-005	0.0000	2.0000e-005			0.0000			0.0000
Off-Road	4.7236	48.4272	30.8835	0.0735		2.1434	2.1434		1.9944	1.9944	0.0000	7,245.8804	7,245.8804	2.1361		7,299.2819
Total	4.7236	48.4272	30.8835	0.0735	1.2000e-004	2.1434	2.1435	2.0000e-005	1.9944	1.9944	0.0000	7,245.8804	7,245.8804	2.1361		7,299.2819

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	2.0000e-003	0.0789	0.0114	2.4000e-004	4.9900e-003	2.6000e-004	5.2600e-003	1.3800e-003	2.5000e-004	1.6300e-003		25.1409	25.1409	1.3800e-003		25.1754
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1482	0.0986	1.2462	2.9300e-003	0.2649	1.8800e-003	0.2667	0.0705	1.7300e-003	0.0723		291.6040	291.6040	9.7800e-003		291.8484
Total	0.1502	0.1775	1.2576	3.1700e-003	0.2699	2.1400e-003	0.2720	0.0719	1.9800e-003	0.0739		316.7449	316.7449	0.0112		317.0238

Bridge Point Upland - Existing Rock Crushing - San Bernardino-South Coast County, Winter

## Bridge Point Upland - Existing Rock Crushing

### San Bernardino-South Coast County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	40.00	User Defined Unit	40.00	0.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	32
<b>Climate Zone</b>	10			<b>Operational Year</b>	2019
<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

Project Characteristics -

Land Use - Rock crushing on approx. 40 acre site

Construction Phase - current operation

Off-road Equipment - current-onsite equipment, cone, jaw, screen, loaders, stackers, water trucks

Grading - Approximately 78 trucks per day

Trips and VMT - approximately 78 trucks per day

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403

Table Name	Column Name	Default Value	New Value
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tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	75.00	261.00
tblConstructionPhase	PhaseEndDate	5/24/2019	12/31/2019
tblConstructionPhase	PhaseStartDate	2/11/2019	1/1/2019
tblGrading	MaterialExported	0.00	624.00
tblLandUse	LotAcreage	0.00	40.00
tblOffRoadEquipment	HorsePower	168.00	350.00
tblOffRoadEquipment	HorsePower	168.00	300.00
tblOffRoadEquipment	HorsePower	168.00	100.00
tblOffRoadEquipment	HorsePower	203.00	375.00
tblOffRoadEquipment	HorsePower	203.00	300.00
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
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

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8737	48.6104	31.9228	0.0764	0.2849	2.1455	2.4304	0.0756	1.9964	2.0720	0.0000	7,531.9677	7,531.9677	2.1461	0.0000	7,585.6212
Maximum	4.8737	48.6104	31.9228	0.0764	0.2849	2.1455	2.4304	0.0756	1.9964	2.0720	0.0000	7,531.9677	7,531.9677	2.1461	0.0000	7,585.6212

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8737	48.6104	31.9228	0.0764	0.2700	2.1455	2.4155	0.0719	1.9964	2.0683	0.0000	7,531.9677	7,531.9677	2.1461	0.0000	7,585.6212
Maximum	4.8737	48.6104	31.9228	0.0764	0.2700	2.1455	2.4155	0.0719	1.9964	2.0683	0.0000	7,531.9677	7,531.9677	2.1461	0.0000	7,585.6212

	ROG	NOx	CO	SO2	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	5.25	0.00	0.62	4.83	0.00	0.18	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
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1	Grading	Grading	1/1/2019	12/31/2019	5	261	
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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0**

### **OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Other Material Handling Equipment	1	8.00	350	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Other Material Handling Equipment	1	8.00	300	0.40
Grading	Other Material Handling Equipment	3	8.00	100	0.40
Grading	Rubber Tired Loaders	1	8.00	375	0.36
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Rubber Tired Loaders	1	8.00	300	0.36
Grading	Off-Highway Trucks	2	4.00	402	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	10	25.00	0.00	78.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### **3.1 Mitigation Measures Construction**

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

### 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					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005			0.0000			0.0000
Off-Road	4.7236	48.4272	30.8835	0.0735		2.1434	2.1434		1.9944	1.9944		7,245.8804	7,245.8804	2.1361		7,299.2819
Total	4.7236	48.4272	30.8835	0.0735	2.7000e-004	2.1434	2.1436	4.0000e-005	1.9944	1.9945		7,245.8804	7,245.8804	2.1361		7,299.2819

#### 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	2.0900e-003	0.0794	0.0131	2.3000e-004	5.2300e-003	2.7000e-004	5.5000e-003	1.4300e-003	2.6000e-004	1.6900e-003		24.4922	24.4922	1.5000e-003		24.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1480	0.1038	1.0262	2.6300e-003	0.2794	1.8800e-003	0.2813	0.0741	1.7300e-003	0.0758		261.5951	261.5951	8.5800e-003		261.8097
Total	0.1501	0.1832	1.0393	2.8600e-003	0.2847	2.1500e-003	0.2868	0.0755	1.9900e-003	0.0775		286.0873	286.0873	0.0101		286.3393

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	2.0000e-005	0.0000	2.0000e-005			0.0000			0.0000
Off-Road	4.7236	48.4272	30.8835	0.0735		2.1434	2.1434		1.9944	1.9944	0.0000	7,245.8804	7,245.8804	2.1361		7,299.2819
<b>Total</b>	<b>4.7236</b>	<b>48.4272</b>	<b>30.8835</b>	<b>0.0735</b>	<b>1.2000e-004</b>	<b>2.1434</b>	<b>2.1435</b>	<b>2.0000e-005</b>	<b>1.9944</b>	<b>1.9944</b>	<b>0.0000</b>	<b>7,245.8804</b>	<b>7,245.8804</b>	<b>2.1361</b>		<b>7,299.2819</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	2.0900e-003	0.0794	0.0131	2.3000e-004	4.9900e-003	2.7000e-004	5.2600e-003	1.3800e-003	2.6000e-004	1.6300e-003		24.4922	24.4922	1.5000e-003		24.5296
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1480	0.1038	1.0262	2.6300e-003	0.2649	1.8800e-003	0.2667	0.0705	1.7300e-003	0.0723		261.5951	261.5951	8.5800e-003		261.8097
<b>Total</b>	<b>0.1501</b>	<b>0.1832</b>	<b>1.0393</b>	<b>2.8600e-003</b>	<b>0.2699</b>	<b>2.1500e-003</b>	<b>0.2720</b>	<b>0.0719</b>	<b>1.9900e-003</b>	<b>0.0739</b>		<b>286.0873</b>	<b>286.0873</b>	<b>0.0101</b>		<b>286.3393</b>