

**Appendix A**  
**Air Quality Assessment**

Air Quality Assessment  
Myford II Project  
City of Tustin, California

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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
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 Myford II Project (Project). The purpose of this Air Quality Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

## 1.1 Project Location

The proposed Project is located at 14321 and 14351 Myford Road in the City of Tustin (City), California, just west of the City's border with the City of Irvine. The City is in central Orange County, bordered by the cities of Irvine and Santa Ana to the west; the City of Orange and unincorporated County of Orange areas to the north; and on the east by the City of Irvine and unincorporated County of Orange territory (see [Figure 1: Regional Vicinity](#) and [Figure 2: Site Vicinity](#)).

The site is occupied by two existing industrial/office buildings totaling 136,098 totaling square feet and is bounded by commercial buildings to the north, west and south, and Myford Road to the east, within the Planned Community Industrial (PC IND) zoning designation. Regional access to the site is provided by State Route 261 (SR-261) freeway, located approximately 0.3 miles east of the Project site, the Interstate 5 (I-5) freeway, located approximately 0.7 miles north of the site, and State Route 55 (SR-55) freeway located approximately 3 miles west of the site.

## 1.2 Project Description

The proposed Myford II Project is comprised of one warehouse distribution building totaling approximately 148,437 square feet with office space, parking, and landscaping on approximately 7.18 net acres as shown in [Figure 3: Site Plan](#). Access to the site would be provided via three driveways on Myford Road.

### Warehouse Facility

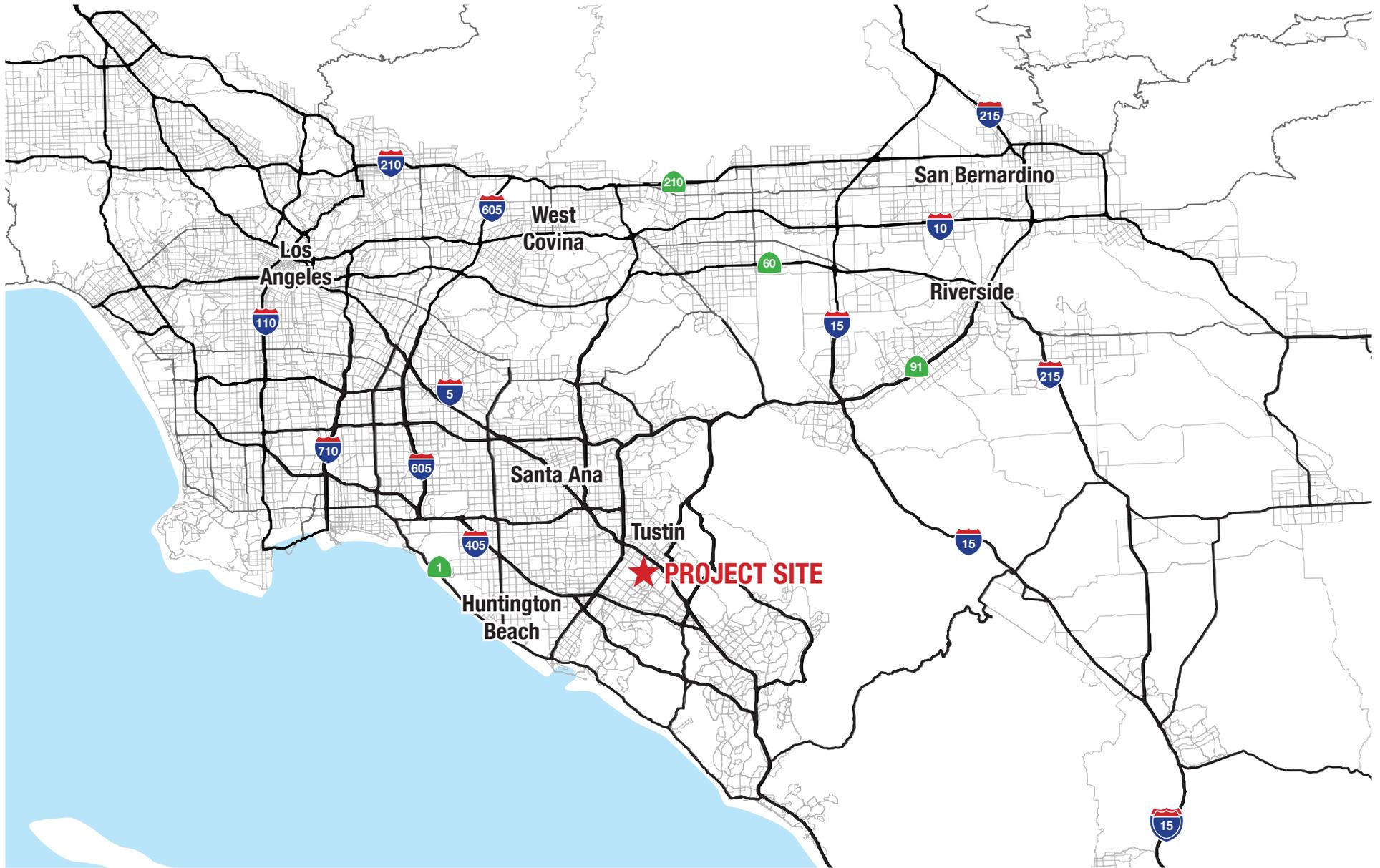
The proposed Project is currently planned as a "speculative building." Therefore, the future tenant(s) or buyer(s) of the building are not currently known. The proposed Project consists of a logistics warehouse building of approximately 148,437-square feet on approximately 7.18 acres. The warehouse Project would include 143,437 square feet of warehouse space and approximately 5,000-square feet of office space, in addition to other associated facilities and improvements, such as a perimeter fencing, parking, onsite and perimeter landscaping, lighting, and exterior sidewalks.

### Site Access

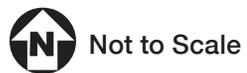
Vehicular and truck site access is provided via three driveways off southbound Myford Road ranging size from 27' to 35'. The Project driveways will only service the Project. The drive aisles located on both the north and south side of the building will be 35 feet wide.

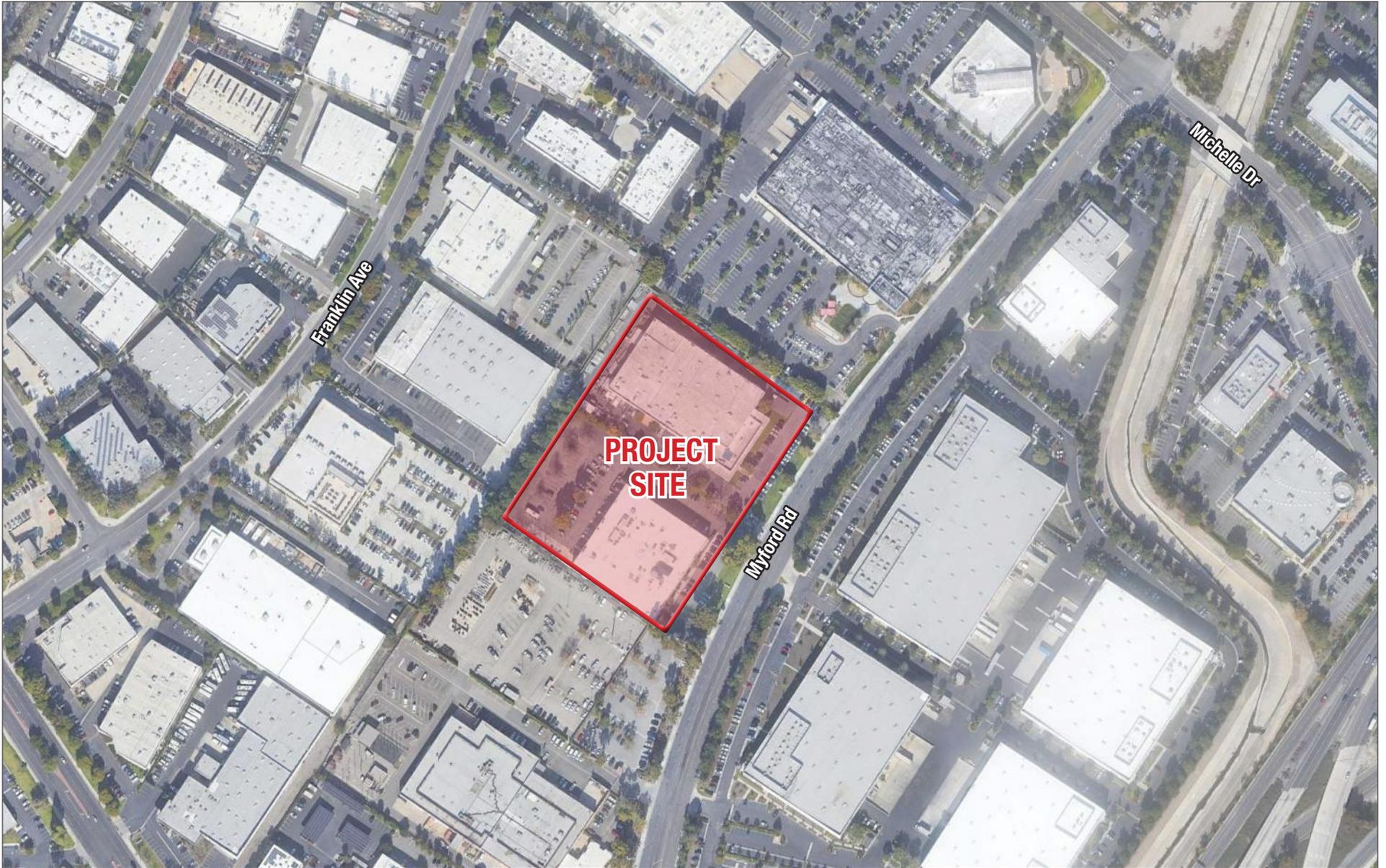
**Parking**

Parking would be located along the east and west perimeters of the site. The proposed Project would provide 103 automobile parking stalls and 19 dock doors. The dock doors will be oriented to face west. Daily activities within the Project site will include maneuvering forklifts, lift equipment, and large semi-trucks through and around the site and backing into the loading docks, all of which emit warning (high pitch beep beep) sounds consistent with the Occupational Safety and Health Administration (OSHA) requirements.

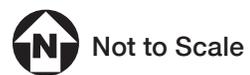


**FIGURE 1:** Regional Vicinity  
 Myford II, Tustin  
 City of Tustin





**FIGURE 2:** Site Vicinity  
Myford II, Tustin  
City of Tustin





## 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 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 SCAB 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 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 SCAB 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 SCAB.

Wind patterns across the SCAB 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 SCAB, 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 SCAB 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.

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

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

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 SCAB 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 state and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants 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 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.
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 O <sub>3</sub> . 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	Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood,

<b>Pollutant</b>	<b>Major Man-Made Sources</b>	<b>Human Health Effects</b>
	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.	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 March 16, 2022.		

## Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e. chronic, carcinogenic or 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. Due to 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. These 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.

Pollutants of concern in the SCAB include O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the Anaheim-Pampas Lane Monitoring Station (located approximately 9.75 miles to the northwest) was used also. Local air quality data from 2018 to 2020 are provided in Table 2: Ambient Air Quality Data, which lists the monitored maximum concentrations and number of exceedances of state or federal air quality standards for each year.

<b>Table 2: Ambient Air Quality Data</b>			
<b>Criteria Pollutant</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Ozone (O<sub>3</sub>)<sup>1</sup></b>			
1-hour Maximum Concentration (ppm)	0.112	0.096	0.142
8-hour Maximum Concentration (ppm)	0.071	0.082	0.097
<i>Number of Days Standard Exceeded</i>			
CAAQS 1-hour (>0.09 ppm)	-	-	-
NAAQS 8-hour (>0.070 ppm)	0	1	6
<b>Carbon Monoxide (CO)<sup>1</sup></b>			
1-hour Maximum Concentration (ppm)	2.31	2.44	2.31
<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>)<sup>1</sup></b>			
1-hour Maximum Concentration (ppm)	0.066	0.059	0.071
<i>Number of Days Standard Exceeded</i>			
NAAQS 1-hour (>0.10 ppm)	0	0	0
CAAQS 1-hour (>0.18 ppm)	0	0	0
<b>Particulate Matter Less Than 10 Microns (PM<sub>10</sub>)<sup>1</sup></b>			
National 24-hour Maximum Concentration	94.6	127.6	74.8
State 24-hour Maximum Concentration	94.6	127.1	74.5
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> )	0	0	0
CAAQS 24-hour (>50 µg/m <sup>3</sup> )	2	4	5
<b>Particulate Matter Less Than 2.5 Microns (PM<sub>2.5</sub>)<sup>1</sup></b>			
National 24-hour Maximum Concentration	63.1	36.1	60.2
State 24-hour Maximum Concentration	68.0	37.1	64.8
<i>Number of Days Standard Exceeded</i>			
NAAQS 24-hour (>35 µg/m <sup>3</sup> )	7	4	12
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; — = not measured			
<sup>1</sup> Measurements taken at the Anaheim-Pampas Lane Monitoring at 1630 W. Pampas Lane, Anaheim, California 92802 (CARB#30178)			
Source: All pollutant measurements are from the CARB Aerometric Data Analysis and Management system database ( <a href="https://www.arb.ca.gov/adam">https://www.arb.ca.gov/adam</a> ) except for CO, which were retrieved from the CARB Air Quality and Meteorological Information System ( <a href="https://www.arb.ca.gov/aqmis2/aqdselect.php">https://www.arb.ca.gov/aqmis2/aqdselect.php</a> ).			

## 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. The nearest residential community is located approximately 1,600 feet to the northwest along Tustin Ranch Road.

### 3 REGULATORY SETTING

#### 3.1 Federal

##### Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the United States Environmental Protection Agency (EPA) developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O<sub>3</sub>, 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 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 3: 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 3](#), 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 3](#).

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> )	0.100 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 (42 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 O<sub>3</sub>, 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 O<sub>3</sub>, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O<sub>3</sub> 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 O<sub>3</sub> 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 O<sub>3</sub> 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 O<sub>3</sub> 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 O<sub>3</sub> level in the area.

<sup>5</sup> The national 1-hour O<sub>3</sub> 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 O<sub>3</sub> 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 state and federal 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 O<sub>3</sub> 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 federal attainment status designations for the SCAB are summarized in [Table 4: South Coast Air Basin Attainment Status](#). The SCAB is currently designated as a nonattainment area with respect to the State O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards, as well as the national 8-hour O<sub>3</sub> and PM<sub>2.5</sub> standards. The SCAB is designated as attainment or unclassified for the remaining state and federal standards.

<b>Pollutant</b>	<b>State</b>	<b>Federal</b>
Ozone (O <sub>3</sub> ) (1 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Ozone (O <sub>3</sub> ) (8 Hour Standard)	Non-Attainment	Non-Attainment (Extreme)
Particulate Matter (PM <sub>2.5</sub> ) (24 Hour Standard)	–	Non-Attainment (Serious)
Particulate Matter (PM <sub>2.5</sub> ) (Annual Standard)	Non-Attainment	Non-Attainment (Moderate)
Particulate Matter (PM <sub>10</sub> ) (24 Hour Standard)	Non-Attainment	Attainment (Maintenance)
Particulate Matter (PM <sub>10</sub> ) (Annual Standard)	Non-Attainment	–
Carbon Monoxide (CO) (1 Hour Standard)	Attainment	Attainment (Maintenance)
Carbon Monoxide (CO) (8 Hour Standard)	Attainment	Attainment (Maintenance)
Nitrogen Dioxide (NO <sub>2</sub> ) (1 Hour Standard)	Attainment	Unclassifiable/Attainment
Nitrogen Dioxide (NO <sub>2</sub> ) (Annual Standard)	Attainment	Attainment (Maintenance)
Sulfur Dioxide (SO <sub>2</sub> ) (1 Hour Standard)	Attainment	Unclassifiable/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; United States Environmental Protection Agency, *Nonattainment Areas for Criteria Pollutants (Green Book)*, 2019.

The following is a list of SCAQMD rules that are required of construction activities associated with the 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 workday 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.
  - **Rule 2305 (Warehouse Indirect Source Rule)** - Rule 2305 was adopted by the SCAQMD Governing Board on May 7, 2021 to reduce NO<sub>x</sub> and particulate matter emissions associated with warehouses and mobile sources attracted to warehouses. This rule applies to all existing and proposed warehouses over 100,000 square feet located in the SCAQMD. Rule 2305 requires warehouse operators to track annual vehicle miles traveled associated with truck trips to and from the warehouse. These trip miles are used to calculate the warehouses WAIRE (Warehouse Actions and Investments to Reduce Emissions) Points Compliance Obligation. WAIRE Points are earned based on emission reduction measures and warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. Reduction strategies listed in the WAIRE menu include acquire zero emission (ZE) or near zero emission (NZE) trucks; require ZE/NZE truck visits; require ZE yard trucks; install on-site ZE charging/fueling infrastructure; install onsite energy systems; and install filtration systems in residences, schools, and other buildings in the adjacent community. Warehouse operators that do not earn a sufficient number of WAIRE points to satisfy the WAIRE Points Compliance Obligation would be required to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby.

### 3.4 Local

#### City of Tustin General Plan

The City of Tustin General Plan contains the following goals and policies that address air quality as part of the Conservation, Open Space, and Recreation Element:

**Goal 1: Reduce air pollution through proper land use, transportation and energy use planning.**

Policy 1.1: Cooperate with the South Coast Air Quality Management District and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.

**Goal 2: Improve air quality by influencing transportation choices of mode, time of day, or whether to travel and to establish a jobs/housing balance**

Policy 2.1: Reduce vehicle trips through incentives, regulations and/or Transportation Demand Management (TDM) programs.

Policy 2.7: Encourage employer rideshare and transit incentives programs by local businesses.

**Goal 3: Reduce particulate emissions to the greatest extent feasible.**

Policy 3.1: Adopt incentives, regulations, and/or procedures to minimize particulate emissions from paved and unpaved roads, agricultural uses, parking lots, and building construction.

**Goal 4: Reduce emissions through reduced energy consumption.**

Policy 4.1: Promote energy conservation in all sectors of the City including residential, commercial, and industrial.

Policy 4.2: Promote local recycling of wastes and the use of recycled materials.

## 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:

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

#### 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 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 5: South Coast Air Quality Management District Emissions Thresholds.

Criteria Air Pollutants and Precursors	Maximum Pounds Per Day	
	Construction-Related	Operational-Related
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, *South Coast AQMD Air Quality Significance Thresholds*, April 2019.

#### Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the Project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project are above state and federal CO standards (the more stringent California standards are 20 ppm for 1-hour and 9 ppm for 8-hour). 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 without expecting to cause or substantially contribute to an exceedance of the most stringent state or federal 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 Tustin is located within SCAQMD SRA 17. LST's interpolated at 488 meters (between the 200- and 500-meter threshold) are provided in Table 6: Local Significance Thresholds for Construction/Operations for informational purposes and to demonstrate that the thresholds increase as acreages increase. However, because the nearest sensitive receptors are located 1,600 feet (488 meters) from the Project site the LST's are interpolated between the 200 meter and 500 meter thresholds.

Project Size	Maximum Pounds Per Day			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
1 Acre	189/189	6,652/6,652	154/37	82/20
2 Acres	203/203	7,301/7,301	162/39	89/21
5 Acres	243/243	9,123/9,123	184/44	106/26

NO<sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; PM<sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM<sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less  
 Note: Based on a receptor distance of 488 meters in SRA 17.  
 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 Project. 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. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod.

Project operations would result in emissions of area sources (consumer products), energy sources (natural gas usage and offsite electrify generation), and mobile sources (motor vehicles from Project generated vehicle trips). Project-generated increases in operational emissions would be predominantly associated with motor vehicle use. The Project vehicle trip generation was obtained from the Project's Transportation Design Procedures Analysis prepared by Kimley-Horn (April 2022), which includes 956 total daily vehicle trips, which include 28 daily truck trips. It should be noted that the aforementioned daily trips are currently excluding the deduction of the current estimated daily trips of the two industrial/office buildings located on the site. When deducted, the trips generated by the project results in a decrease of 110 daily trips.

As discussed above, the SCAQMD provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of a Project's impact on regional air quality.

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's Localized Significance Threshold (LST) Methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling. 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 standards and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

## 5 POTENTIAL IMPACTS

### 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 state and federal 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 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 2020 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 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 Project will not exceed the assumptions in the AQMP or increments based on the years of the Project build-out phase.

According to the SCAQMD's *CEQA Air Quality Handbook*, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in [Table 7](#) and [Table 8](#), the Project would not exceed construction or operation emission standards. Therefore, the Project would not contribute to an existing air quality violation. Thus, the Project is 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 Project is consistent with the land use

designation and development density presented in the City's General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP. Thus, the Project is consistent with the second criterion.

Based on these criteria, the Project would not conflict with or obstruct implementation of the AQMP.

**Mitigation Measures:** No mitigation is required

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

**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 state or federal ambient air quality standard?**

### Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O<sub>3</sub>-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.

Construction activities associated with the Project are estimated to be completed within 1 year. Construction-generated emissions associated the 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: Air Quality Modeling Data](#) for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the Project are summarized in in [Table 7: Construction-Related Emissions](#).

Fugitive dust emissions 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. Standard Condition 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.<sup>2</sup> This standard condition would be required to

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<sup>2</sup> Standard Conditions are existing requirements and conditions of approval that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Applicable Standard Conditions are included at the end of this impact analysis.

ensure compliance with SCAQMD Rules and Regulations, which would be verified and enforced through the City’s development review process.

<b>Table 7: Construction-Related Emissions</b>						
<b>Construction Year</b>	<b>Maximum Pounds Per Day</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Year 1 (2024)	23.92	27.21	23.19	0.05	9.82	5.50
<i>SCAQMD Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>55</i>	<i>150</i>
<b>Exceed SCAQMD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
ROG = Reactive Organic Gases; NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; SO <sub>2</sub> = Sulfur Dioxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less						
Notes: SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times 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. No adjustments were applied to equipment exhaust. Refer to Appendix A for Model Data Outputs.						
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.						

Rule 1113 provides specifications on painting practices and regulates the ROG content of paint. As required by law, all architectural coatings for the Project structures would comply with SCAQMD Rule 1113. Standard Condition AQ-2 requires implementation of Rule 1113 which limits the VOC content of paint to 50 grams per liter or less.<sup>3</sup> Compliance with AQ-2 would be required to ensure compliance with SCAQMD Rules and Regulations, which would be verified and enforced through the City’s development review process.

As shown in Table 7, all criteria pollutant emissions would remain below their respective thresholds. While impacts would be considered less than significant, the Project would be subject to SCAQMD Rules 402, 403, and 1113, described in the Regulatory Framework subsection above and required by Standard Conditions AQ-1 and AQ-2.<sup>4</sup>

**Operational Emissions**

Project-generated emissions would be primarily 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 Project are summarized in Table 8: Operational Emissions. Note that emissions rates differ from summer to winter because different weather patterns affect pollutant mixing, dispersion, O<sub>3</sub> formation, and other factors. Table 8 also provides the emissions associated with operations of the two existing industrial/office buildings totaling approximately 136,098 square feet. As shown in Table 8, the operational Project emissions are below the SCAQMD’s thresholds, impacts would be less than significant

<sup>3</sup> Applicable Standard Conditions are included at the end of this impact analysis.

<sup>4</sup> Ibid.

<b>Table 8: Operational Emissions</b>						
Source	Maximum Pounds Per Day					
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Existing Conditions</b>						
Area <sup>1</sup>	3.12	0.00	0.03	0.00	0.00	0.00
Energy <sup>1</sup>	0.04	0.36	0.30	0.00	0.03	0.03
Mobile <sup>1</sup>	2.95	3.26	30.36	0.07	8.04	2.18
<b>Total Emissions<sup>1</sup></b>	<b>6.11</b>	<b>3.62</b>	<b>30.69</b>	<b>0.08</b>	<b>8.07</b>	<b>2.20</b>
<b>Proposed Project</b>						
<b>Summer Emissions</b>						
Area	3.39	0.00	0.03	0.00	0.00	0.00
Energy	0.02	0.16	0.14	0.00	0.01	0.01
Mobile	2.51	5.83	25.45	0.08	7.20	1.98
Off-Road – Forklifts	0.41	3.91	5.13	0.01	0.22	0.21
Off-Road – Yard Trucks	0.14	4.69	32.56	0.00	0.06	0.05
Backup Generator	1.69	4.71	4.30	0.01	0.25	0.25
<b>Total Emissions</b>	<b>8.16</b>	<b>19.30</b>	<b>67.61</b>	<b>0.10</b>	<b>7.74</b>	<b>2.50</b>
<b>Winter Emissions</b>						
Area	3.39	0.00	0.03	0.00	0.00	0.00
Energy	0.02	0.16	0.14	0.00	0.01	0.01
Mobile	2.50	16.14	25.20	0.08	7.20	1.98
Off-Road – Forklifts	0.41	3.91	5.13	0.01	0.22	0.21
Off-Road – Yard Trucks	0.14	4.69	32.56	0.00	0.06	0.05
Backup Generator	1.69	4.71	4.30	0.01	0.25	0.25
<b>Total Emissions</b>	<b>8.15</b>	<b>29.61</b>	<b>67.36</b>	<b>0.10</b>	<b>7.74</b>	<b>2.50</b>
<b>Net Emissions</b>						
Existing Conditions	6.11	3.62	30.69	0.08	8.07	2.20
Proposed Project <sup>1</sup>	8.16	29.61	67.61	0.10	7.74	2.50
<b>Net Change</b>	<b>2.05</b>	<b>25.99</b>	<b>36.92</b>	<b>0.02</b>	<b>-0.33</b>	<b>0.30</b>
<b>SCAQMD Significance Thresholds</b>	55	55	550	150	55	150
Exceed thresholds?	No	No	No	No	No	No
ROG = Reactive Organic Gases; NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; SO <sub>2</sub> = Sulfur Dioxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs. Note: Total values are from CalEEMod and may not add up 100% due to rounding. 1. The highest values between summer and winter results were used as a worst case scenario						

As noted above, the Project’s operational emissions would be associated with mobile sources (i.e., motor vehicle use), energy sources, and area sources. Each of these sources are described below.

- **Area Source Emissions.** Area source emissions would be generated due to on-site equipment, architectural coating, and landscape maintenance equipment that were previously not present on the site.
- **Energy Source Emissions.** Energy source emissions would be generated due to electricity and natural gas usage associated with the 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.
- **Off-Road Equipment.** Operational off-road emissions would be generated by off-road cargo handling equipment used during operational activities. For this project it was assumed that the warehouses would include three forklifts and one yard truck per SCAQMD data<sup>5</sup>.
- **Emergency Backup Generators.** As the Project warehouse is speculative, it is unknown whether emergency backup generators would be used. Backup generators would only be used in the event of a power failure and would not be part of the Project's normal daily operations. Nonetheless, emissions associated with this equipment were included to be conservative. Emissions from an emergency backup generator for each warehouse building were calculated separately from CalEEMod; refer to Appendix A. However, CalEEMod default emissions rates were used. If backup generators are required, the end user would be required to obtain a permit from the SCAQMD prior to installation. Emergency backup generators must meet SCAQMD's Best Available Control Technology (BACT) requirements and comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), which would minimize emissions.
- **Mobile Source Emissions.** 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 are based on the trip generation within the Project Traffic Impact Study and incorporated into CalEEMod as recommended by the SCAQMD. Per the Project Traffic Memorandum, using the High-Cube Fulfillment Center Warehouse trip generation rate (Institute of Transportation Engineers [ITE] code 155) the Project would generate 956 daily vehicle trips (928 passenger cars and 28 trucks). Additionally, the existing industrial/office uses are currently estimated to generate 1,066 (non-passenger car equivalent) daily trips. When deducted, the trips generated by the project results in a decrease of 110 daily trips.

Table 8 shows the net mobile source emissions would be below SCAQMD thresholds for each of the criteria pollutants analyzed. As such, the Project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation. As a result, impacts associated with operational air quality related specifically to mobile emissions would be less than significant.

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<sup>5</sup> SCAQMD, *High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results*, June 2014.

It should be noted that SCAQMD Rule 2305 requires the Project operator to directly reduce NO<sub>x</sub> and particulate matter emissions or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. Alternatively, warehouse operators can choose to pay a mitigation fee. Funds from the mitigation fee will be used to incentivize the purchase of cleaner trucks and charging/fueling infrastructure in communities nearby.

Warehouse owners and operators are required to earn Warehouse Actions and Investments to Reduce Emissions (WAIRE) Points each year. WAIRE points are a menu-based system earned by emission reduction measures. Warehouse operators are required to submit an annual WAIRE Report which includes truck trip data and emission reduction measures. WAIRE points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero-Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. Therefore, the Project operator would be required to implement additional emission reduction strategies. Conservatively, this analysis does not take credit for these potential reductions. Compliance with Rule 2305 would reduce emissions below what is currently analyzed.

### **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. Appendix D of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (2003) notes that projects that result in emissions that do not exceed the project-specific SCAQMD regional thresholds of significance should result in a less than significant impact on a cumulative basis unless there is other pertinent information to the contrary. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative impact on air quality in the SCAB would not be cumulatively considerable. As shown in [Table 7](#) above, Project construction-related emissions by themselves would not exceed the SCAQMD significance thresholds for criteria pollutants. Therefore, the proposed Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the FCAA 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 SCAB, which would include related projects. Compliance with SCAQMD rules and regulations would further reduce the Project construction-related impacts. Therefore, Project-related construction emissions, combined with those from other projects in the area, would not substantially deteriorate local air quality. Construction emissions associated with the 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 8](#), the Project operational emissions would not exceed the SCAQMD thresholds. Therefore, impacts would be less than significant.

### **Standard Conditions and Requirements:**

Standard Conditions are existing requirements and conditions of approval that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical standard conditions and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because Standard Conditions are neither Project specific nor a result of development of the Project, they are not considered to be either PDFs or Mitigation Measures.

**SC 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.

**SC 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 comply with SCAQMD Rule 1113 which requires building envelope coatings to have a volatile organic compound rating of 50 grams per liter or less.

**SC AQ-3** Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations, Section 2449.

**SC AQ-4** Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Article 9, Chapter 7 of the City's Municipal Code).

**SC AQ-5** The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy

efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

**SC AQ-6** The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance Section 5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance Section 5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), nonresidential construction shall comply with Section 5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

**SC AQ-7** All on-site forklifts shall be non-diesel and shall be powered by electricity, compressed natural gas, or propane if technically feasible.

**Mitigation Measures:** No mitigation is required

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

**Threshold 5.3** Would the Project expose sensitive receptors to substantial pollutant concentrations?

#### Localized Construction Significance Analysis

The nearest sensitive receptor is a residential community located 1,600 feet (488 meters) northwest of the Project along Tustin Ranch Road. 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, Table 9: 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 Central Orange County (SRA 17) since this area includes the Project. 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 2.5 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 a 2.5-acre threshold were interpolated and utilized for this analysis.

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Tractors	3	0.5	8	1.5
	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
<b>Total Acres Graded per Day</b>					<b>2.5</b>

Source: CalEEMod version 2020.4.0. 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, only emissions included in the CalEEMod “on-site” emissions outputs were considered. The nearest sensitive receptors are the single-family residences located 1,600 feet (488 meters) northwest of the Project. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 488 meters were interpolated and utilized in this analysis. Table 10: Localized Significance of Construction Emissions, presents the results of localized emissions during each construction phase. Table 10 shows that emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Significant impacts would not occur concerning LSTs during construction.

Construction Activity	Maximum Pounds Per Day			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Demolition	20.88	19.71	5.19	1.53
Site Preparation	27.18	18.34	20.89	11.23
Grading	17.03	14.76	7.81	4.09
Building Construction	13.44	16.17	0.61	0.58
Paving	9.52	14.63	0.47	0.43
Architectural Coating	1.22	1.81	0.06	0.06
<i>SCAQMD Localized Screening Threshold (adjusted for 2.5 acres at 488 meters)</i>	<i>209</i>	<i>7,604</i>	<i>166</i>	<i>92</i>
<b>Exceed SCAQMD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

NO<sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; PM<sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM<sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less

Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.

### Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to the operational phase of a project only if it 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 Project is a warehouse, the operational phase LST protocol is conservatively applied to both the area source and all the mobile source emissions. LSTs thresholds for receptors were interpolated for 488 meters because the closest receptors are 488 meters away. Although the warehouse is approximately 7.2 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 11: Localized Significance of Operational Emissions](#), conservatively include all on-site Project-related stationary sources and 100 percent of the Project-related new mobile sources, since a portion of mobile sources could include trucks idling on-site. [Table 11](#) 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.

Activity	Maximum Pounds Per Day			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
On-Site and Mobile Source Emissions	29.61	67.61	7.74	2.50
SCAQMD Localized Screening Threshold (adjusted for 5 acres at 488 meters)	243	9,123	44	22
<b>Exceed SCAQMD Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less				
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.				

### 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).

The Friant Ranch project was a 942-acre Specific Plan that involved a commercial master planned community of approximately 2,500 dwelling units and extensive commercial supporting development. The anticipated air quality impacts resulting from this development included significant and unavoidable emissions of multiple criteria pollutants (including significant emissions of both primary O<sub>3</sub> precursors [NO<sub>x</sub> and ROGs]) at levels that exceeded the daily thresholds of significance. As noted above and shown in [Table 8](#), the Project's operational emissions are below SCAQMD's significance thresholds, resulting in a less than significant impact.

The SCAQMD has set its CEQA significance thresholds 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>6</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 LSTs and 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.

NO<sub>x</sub> and ROG are precursor emissions that form ozone in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. Breathing ground-level ozone can result health effects that include: reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

According to the SCAQMD's 2016 AQMP, ozone, NO<sub>x</sub>, and ROG have been decreasing in the Basin since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled in the Basin continue to increase, NO<sub>x</sub> and ROG levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO<sub>x</sub> emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. The 2016 AQMP demonstrates how the SCAQMD's control strategy to meet the 8-hour ozone standard in 2023 would lead to sufficient NO<sub>x</sub> emission reductions to attain the 1-hour ozone standard by 2022. In addition, since NO<sub>x</sub> emissions also lead to the formation of PM<sub>2.5</sub>, the NO<sub>x</sub> reductions needed to meet the ozone standards will likewise lead to improvement of PM<sub>2.5</sub> levels and attainment of PM<sub>2.5</sub> standards.

The SCAQMD's air quality modeling demonstrates that NO<sub>x</sub> reductions prove to be much more effective in reducing ozone levels and will also lead to significant improvement in PM<sub>2.5</sub> concentrations. NO<sub>x</sub>-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane. The 2016 AQMP identifies robust NO<sub>x</sub> reductions from new regulations on RECLAIM facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NO<sub>x</sub> emissions levels achievable but there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and backup power equipment. The AQMD plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies.

The 2016 AQMP also emphasizes that beginning in 2012, continued implementation of previously adopted regulations will lead to NO<sub>x</sub> emission reductions of 68 percent by 2023 and 80 percent by 2031. With the

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<sup>6</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)]

addition of 2016 AQMP proposed regulatory measures, a 30 percent reduction of NO<sub>x</sub> from stationary sources is expected in the 15-year period between 2008 and 2023. This is in addition to significant NO<sub>x</sub> reductions from stationary sources achieved in the decades prior to 2008.

As previously discussed, localized effects of on-site Project emissions on nearby receptors were found to be less than significant (refer to [Table 10](#) and [Table 11](#)). 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 state or federal ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA 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. Information on health impacts related to exposure to ozone and particulate matter emissions published by the U.S. EPA and CARB have been summarized above and discussed in the Regulatory Framework section. As shown above, Project-related emissions would not exceed the regional thresholds or the LSTs, 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 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.

The South Coast Air Basin (SCAB) 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 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 956 additional daily vehicle trips (-6 net a.m. peak hour and 52 net p.m. peak hour trips) attributable to the Project. Therefore, impacts would be less than significant.

### **Construction-Related Diesel Particulate Matter**

Construction would result in the generation of DPM emissions from the use of off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e. potential exposure to TAC emission

levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The closest sensitive receptors are located approximately 1,600 feet from the property boundary and major Project construction areas.

California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e. move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5 minutes to further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. For these reasons, DPM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and the Project would have a less than significant impact.

**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 Project would not include any of the land uses that have been identified by the SCAQMD as odor sources.

During construction-related activities, some odors (not substantial pollutant concentrations) that may be detected are those typical of construction vehicles (e.g. diesel exhaust from grading and construction equipment). These odors are a temporary short-term impact that is typical of construction projects and would disperse rapidly. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the Project would not create objectionable odors.

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

**Level of Significance:** No impact.

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# Appendix A

## Air Quality Modeling Data

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Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Myford Existing  
Orange County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	62.51	1000sqft	1.43	62,506.00	0
Industrial Park	20.72	1000sqft	0.48	20,720.00	0
Manufacturing	22.74	1000sqft	0.52	22,740.00	0
Unrefrigerated Warehouse-No Rail	30.13	1000sqft	0.69	30,130.00	0
Parking Lot	176.86	1000sqft	4.06	176,860.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	8			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	390.98	<b>CH4 Intensity (lb/MW hr)</b>	0.033	<b>N2O Intensity (lb/MW hr)</b>	0.004

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

- Project Characteristics -
- Land Use - existing site area
- Construction Phase - existing only
- Trips and VMT - Demolished material hauled to Frank R. Bowerman Landfill, approximately 7.9 miles from site.
- Demolition -
- Grading -
- Vehicle Trips - existing land uses/trips
- Construction Off-road Equipment Mitigation -



Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Energy	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Mobile	2.9511	3.0335	30.3587	0.0730	7.9905	0.0486	8.0391	2.1298	0.0452	2.1750		7,560.5117	7,560.5117	0.4236	0.2869	7,656.5999
<b>Total</b>	<b>6.1102</b>	<b>3.3943</b>	<b>30.6935</b>	<b>0.0752</b>	<b>7.9905</b>	<b>0.0762</b>	<b>8.0666</b>	<b>2.1298</b>	<b>0.0727</b>	<b>2.2025</b>		<b>7,993.2904</b>	<b>7,993.2904</b>	<b>0.4321</b>	<b>0.2948</b>	<b>8,091.9544</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Energy	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Mobile	2.9511	3.0335	30.3587	0.0730	7.9905	0.0486	8.0391	2.1298	0.0452	2.1750		7,560.5117	7,560.5117	0.4236	0.2869	7,656.5999
<b>Total</b>	<b>6.1102</b>	<b>3.3943</b>	<b>30.6935</b>	<b>0.0752</b>	<b>7.9905</b>	<b>0.0762</b>	<b>8.0666</b>	<b>2.1298</b>	<b>0.0727</b>	<b>2.2025</b>		<b>7,993.2904</b>	<b>7,993.2904</b>	<b>0.4321</b>	<b>0.2948</b>	<b>8,091.9544</b>

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	1/1/2024	12/31/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.06

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

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Myford Existing - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	2.9511	3.0335	30.3587	0.0730	7.9905	0.0486	8.0391	2.1298	0.0452	2.1750		7,560.5117	7,560.5117	0.4236	0.2869	7,656.5999
Unmitigated	2.9511	3.0335	30.3587	0.0730	7.9905	0.0486	8.0391	2.1298	0.0452	2.1750		7,560.5117	7,560.5117	0.4236	0.2869	7,656.5999

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	677.05	677.05	677.05	2,181,077	2,181,077
Industrial Park	229.99	229.99	229.99	914,652	914,652
Manufacturing	107.99	107.99	107.99	478,189	478,189
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	50.92	50.92	50.92	218,227	218,227
Total	1,065.94	1,065.94	1,065.94	3,792,146	3,792,146

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	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
General Office Building	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Industrial Park	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Manufacturing	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Unrefrigerated Warehouse-No Rail	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Natural Gas Unmitigated	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816

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

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1549.81	0.0167	0.1519	0.1276	9.1000e-004		0.0116	0.0116		0.0116	0.0116		182.3302	182.3302	3.4900e-003	3.3400e-003	183.4137
Industrial Park	513.742	5.5400e-003	0.0504	0.0423	3.0000e-004		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003		60.4403	60.4403	1.1600e-003	1.1100e-003	60.7995
Manufacturing	1293.38	0.0140	0.1268	0.1065	7.6000e-004		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		152.1619	152.1619	2.9200e-003	2.7900e-003	153.0662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	321.112	3.4600e-003	0.0315	0.0264	1.9000e-004		2.3900e-003	2.3900e-003		2.3900e-003	2.3900e-003		37.7778	37.7778	7.2000e-004	6.9000e-004	38.0023
<b>Total</b>		<b>0.0397</b>	<b>0.3606</b>	<b>0.3029</b>	<b>2.1600e-003</b>		<b>0.0274</b>	<b>0.0274</b>		<b>0.0274</b>	<b>0.0274</b>		<b>432.7102</b>	<b>432.7102</b>	<b>8.2900e-003</b>	<b>7.9300e-003</b>	<b>435.2816</b>

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

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

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.54981	0.0167	0.1519	0.1276	9.1000e-004		0.0116	0.0116		0.0116	0.0116		182.3302	182.3302	3.4900e-003	3.3400e-003	183.4137
Industrial Park	0.513742	5.5400e-003	0.0504	0.0423	3.0000e-004		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003		60.4403	60.4403	1.1600e-003	1.1100e-003	60.7995
Manufacturing	1.29338	0.0140	0.1268	0.1065	7.6000e-004		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		152.1619	152.1619	2.9200e-003	2.7900e-003	153.0662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.321112	3.4600e-003	0.0315	0.0264	1.9000e-004		2.3900e-003	2.3900e-003		2.3900e-003	2.3900e-003		37.7778	37.7778	7.2000e-004	6.9000e-004	38.0023
<b>Total</b>		<b>0.0397</b>	<b>0.3606</b>	<b>0.3029</b>	<b>2.1600e-003</b>		<b>0.0274</b>	<b>0.0274</b>		<b>0.0274</b>	<b>0.0274</b>		<b>432.7102</b>	<b>432.7102</b>	<b>8.2900e-003</b>	<b>7.9300e-003</b>	<b>435.2816</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Unmitigated	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730

**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	0.3591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9500e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
<b>Total</b>	<b>3.1194</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0685</b>	<b>0.0685</b>	<b>1.8000e-004</b>		<b>0.0730</b>

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9500e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
<b>Total</b>	<b>3.1194</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0685</b>	<b>0.0685</b>	<b>1.8000e-004</b>		<b>0.0730</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Myford Existing - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Myford Existing  
Orange County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	62.51	1000sqft	1.43	62,506.00	0
Industrial Park	20.72	1000sqft	0.48	20,720.00	0
Manufacturing	22.74	1000sqft	0.52	22,740.00	0
Unrefrigerated Warehouse-No Rail	30.13	1000sqft	0.69	30,130.00	0
Parking Lot	176.86	1000sqft	4.06	176,860.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	8			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - existing site area

Construction Phase - existing only

Trips and VMT - Demolished material hauled to Frank R. Bowerman Landfill, approximately 7.9 miles from site.

Demolition -

Grading -

Vehicle Trips - existing land uses/trips

Construction Off-road Equipment Mitigation -



Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Energy	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Mobile	2.9339	3.2578	29.9520	0.0702	7.9905	0.0487	8.0391	2.1298	0.0452	2.1750		7,271.3354	7,271.3354	0.4364	0.2988	7,371.2776
<b>Total</b>	<b>6.0929</b>	<b>3.6186</b>	<b>30.2868</b>	<b>0.0724</b>	<b>7.9905</b>	<b>0.0762</b>	<b>8.0666</b>	<b>2.1298</b>	<b>0.0727</b>	<b>2.2025</b>		<b>7,704.1141</b>	<b>7,704.1141</b>	<b>0.4449</b>	<b>0.3067</b>	<b>7,806.6322</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Energy	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Mobile	2.9339	3.2578	29.9520	0.0702	7.9905	0.0487	8.0391	2.1298	0.0452	2.1750		7,271.3354	7,271.3354	0.4364	0.2988	7,371.2776
<b>Total</b>	<b>6.0929</b>	<b>3.6186</b>	<b>30.2868</b>	<b>0.0724</b>	<b>7.9905</b>	<b>0.0762</b>	<b>8.0666</b>	<b>2.1298</b>	<b>0.0727</b>	<b>2.2025</b>		<b>7,704.1141</b>	<b>7,704.1141</b>	<b>0.4449</b>	<b>0.3067</b>	<b>7,806.6322</b>

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	1/1/2024	12/31/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.06

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

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	2.9339	3.2578	29.9520	0.0702	7.9905	0.0487	8.0391	2.1298	0.0452	2.1750		7,271.3354	7,271.3354	0.4364	0.2988	7,371.2776
Unmitigated	2.9339	3.2578	29.9520	0.0702	7.9905	0.0487	8.0391	2.1298	0.0452	2.1750		7,271.3354	7,271.3354	0.4364	0.2988	7,371.2776

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	677.05	677.05	677.05	2,181,077	2,181,077
Industrial Park	229.99	229.99	229.99	914,652	914,652
Manufacturing	107.99	107.99	107.99	478,189	478,189
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	50.92	50.92	50.92	218,227	218,227
<b>Total</b>	<b>1,065.94</b>	<b>1,065.94</b>	<b>1,065.94</b>	<b>3,792,146</b>	<b>3,792,146</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	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
General Office Building	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Industrial Park	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Manufacturing	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Unrefrigerated Warehouse-No Rail	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816
Natural Gas Unmitigated	0.0397	0.3606	0.3029	2.1600e-003		0.0274	0.0274		0.0274	0.0274		432.7102	432.7102	8.2900e-003	7.9300e-003	435.2816

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

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1549.81	0.0167	0.1519	0.1276	9.1000e-004		0.0116	0.0116		0.0116	0.0116		182.3302	182.3302	3.4900e-003	3.3400e-003	183.4137
Industrial Park	513.742	5.5400e-003	0.0504	0.0423	3.0000e-004		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003		60.4403	60.4403	1.1600e-003	1.1100e-003	60.7995
Manufacturing	1293.38	0.0140	0.1268	0.1065	7.6000e-004		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		152.1619	152.1619	2.9200e-003	2.7900e-003	153.0662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	321.112	3.4600e-003	0.0315	0.0264	1.9000e-004		2.3900e-003	2.3900e-003		2.3900e-003	2.3900e-003		37.7778	37.7778	7.2000e-004	6.9000e-004	38.0023
<b>Total</b>		<b>0.0397</b>	<b>0.3606</b>	<b>0.3029</b>	<b>2.1600e-003</b>		<b>0.0274</b>	<b>0.0274</b>		<b>0.0274</b>	<b>0.0274</b>		<b>432.7102</b>	<b>432.7102</b>	<b>8.2900e-003</b>	<b>7.9300e-003</b>	<b>435.2816</b>

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	1.54981	0.0167	0.1519	0.1276	9.1000e-004		0.0116	0.0116		0.0116	0.0116		182.3302	182.3302	3.4900e-003	3.3400e-003	183.4137
Industrial Park	0.513742	5.5400e-003	0.0504	0.0423	3.0000e-004		3.8300e-003	3.8300e-003		3.8300e-003	3.8300e-003		60.4403	60.4403	1.1600e-003	1.1100e-003	60.7995
Manufacturing	1.29338	0.0140	0.1268	0.1065	7.6000e-004		9.6400e-003	9.6400e-003		9.6400e-003	9.6400e-003		152.1619	152.1619	2.9200e-003	2.7900e-003	153.0662
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.321112	3.4600e-003	0.0315	0.0264	1.9000e-004		2.3900e-003	2.3900e-003		2.3900e-003	2.3900e-003		37.7778	37.7778	7.2000e-004	6.9000e-004	38.0023
<b>Total</b>		<b>0.0397</b>	<b>0.3606</b>	<b>0.3029</b>	<b>2.1600e-003</b>		<b>0.0274</b>	<b>0.0274</b>		<b>0.0274</b>	<b>0.0274</b>		<b>432.7102</b>	<b>432.7102</b>	<b>8.2900e-003</b>	<b>7.9300e-003</b>	<b>435.2816</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
Unmitigated	3.1194	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730

**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	0.3591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9500e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
<b>Total</b>	<b>3.1194</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0685</b>	<b>0.0685</b>	<b>1.8000e-004</b>		<b>0.0730</b>

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9500e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0685	0.0685	1.8000e-004		0.0730
<b>Total</b>	<b>3.1194</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0685</b>	<b>0.0685</b>	<b>1.8000e-004</b>		<b>0.0730</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Myford Existing - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Myford II  
Orange County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Unrefrigerated Warehouse-No Rail	143.44	1000sqft	3.29	143,440.00	0
Parking Lot	164.22	1000sqft	3.78	164,220.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	8			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - building area

Construction Phase - anticipated schedule

Trips and VMT - Demolished material hauled to Frank R. Bowerman Landfill, approximately 7.9 miles from site.

Demolition -

Grading -

Vehicle Trips - Office = 928 daily passenger car trips, Warehouse = 28 daily truck trips

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Fleet Mix - office = passenger cars, warehouse = trucks

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	230.00	110.00
tblConstructionPhase	NumDays	20.00	61.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	3/21/2025	11/12/2024
tblConstructionPhase	PhaseEndDate	1/24/2025	10/25/2024
tblConstructionPhase	PhaseEndDate	1/26/2024	3/25/2024

## Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblConstructionPhase	PhaseEndDate	3/8/2024	5/24/2024
tblConstructionPhase	PhaseEndDate	2/21/2025	11/5/2024
tblConstructionPhase	PhaseEndDate	2/9/2024	3/29/2024
tblConstructionPhase	PhaseStartDate	2/22/2025	8/12/2024
tblConstructionPhase	PhaseStartDate	3/9/2024	5/25/2024
tblConstructionPhase	PhaseStartDate	2/10/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/25/2025	10/26/2024
tblConstructionPhase	PhaseStartDate	1/27/2024	3/26/2024
tblFleetMix	HHD	4.9060e-003	0.50
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.6050e-003	0.27
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.8690e-003	0.00
tblFleetMix	MHD	0.01	0.23
tblFleetMix	OBUS	6.5700e-004	0.00
tblFleetMix	SBUS	7.1300e-004	0.00
tblFleetMix	UBUS	3.8100e-004	0.00
tblLandUse	LotAcreage	3.77	3.78
tblVehicleTrips	CNW_TL	6.90	33.20
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.21	185.60

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	ST_TR	1.74	0.20
tblVehicleTrips	SU_TR	0.70	185.60
tblVehicleTrips	SU_TR	1.74	0.20
tblVehicleTrips	WD_TR	9.74	185.60
tblVehicleTrips	WD_TR	1.74	0.20

**2.0 Emissions Summary**

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Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Energy	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
Mobile	2.5136	5.8251	25.4493	0.0782	7.1336	0.0653	7.1989	1.9156	0.0614	1.9770		8,235.5471	8,235.5471	0.4960	0.5477	8,411.1566
<b>Total</b>	<b>5.9212</b>	<b>5.9874</b>	<b>25.6173</b>	<b>0.0791</b>	<b>7.1336</b>	<b>0.0777</b>	<b>7.2113</b>	<b>1.9156</b>	<b>0.0739</b>	<b>1.9895</b>		<b>8,430.0496</b>	<b>8,430.0496</b>	<b>0.4999</b>	<b>0.5512</b>	<b>8,606.8189</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Energy	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
Mobile	2.5136	5.8251	25.4493	0.0782	7.1336	0.0653	7.1989	1.9156	0.0614	1.9770		8,235.5471	8,235.5471	0.4960	0.5477	8,411.1566
<b>Total</b>	<b>5.9212</b>	<b>5.9874</b>	<b>25.6173</b>	<b>0.0791</b>	<b>7.1336</b>	<b>0.0777</b>	<b>7.2113</b>	<b>1.9156</b>	<b>0.0739</b>	<b>1.9895</b>		<b>8,430.0496</b>	<b>8,430.0496</b>	<b>0.4999</b>	<b>0.5512</b>	<b>8,606.8189</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	1/1/2024	3/25/2024	5	61	
2	Site Preparation	Site Preparation	3/26/2024	3/29/2024	5	4	
3	Grading	Grading	4/1/2024	5/24/2024	5	40	
4	Building Construction	Building Construction	5/25/2024	10/25/2024	5	110	
5	Paving	Paving	10/26/2024	11/5/2024	5	7	
6	Architectural Coating	Architectural Coating	8/12/2024	11/12/2024	5	67	

**Acres of Grading (Site Preparation Phase): 6**

**Acres of Grading (Grading Phase): 40**

**Acres of Paving: 3.78**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,660; Non-Residential Outdoor: 74,220; Striped Parking Area: 9,853 (Architectural Coating – sqft)**

**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

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	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
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**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	1,191.00	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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	131.00	51.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2272	0.0000	4.2272	0.6400	0.0000	0.6400			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>2.2437</b>	<b>20.8781</b>	<b>19.7073</b>	<b>0.0388</b>	<b>4.2272</b>	<b>0.9602</b>	<b>5.1873</b>	<b>0.6400</b>	<b>0.8922</b>	<b>1.5322</b>		<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0402	2.3100	0.8152	0.0108	0.3405	0.0156	0.3561	0.0932	0.0150	0.1082		1,231.584 2	1,231.584 2	0.1276	0.1977	1,293.684 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0800</b>	<b>2.3343</b>	<b>1.2433</b>	<b>0.0122</b>	<b>0.5082</b>	<b>0.0165</b>	<b>0.5246</b>	<b>0.1377</b>	<b>0.0157</b>	<b>0.1534</b>		<b>1,372.897 4</b>	<b>1,372.897 4</b>	<b>0.1305</b>	<b>0.2006</b>	<b>1,435.930 0</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					1.8071	0.0000	1.8071	0.2736	0.0000	0.2736			0.0000			0.0000
Off-Road	0.7126	4.1463	23.0713	0.0388		0.1638	0.1638		0.1638	0.1638	0.0000	3,747.422 8	3,747.422 8	1.0485		3,773.634 5
<b>Total</b>	<b>0.7126</b>	<b>4.1463</b>	<b>23.0713</b>	<b>0.0388</b>	<b>1.8071</b>	<b>0.1638</b>	<b>1.9710</b>	<b>0.2736</b>	<b>0.1638</b>	<b>0.4375</b>	<b>0.0000</b>	<b>3,747.422 8</b>	<b>3,747.422 8</b>	<b>1.0485</b>		<b>3,773.634 5</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0402	2.3100	0.8152	0.0108	0.3250	0.0156	0.3406	0.0894	0.0150	0.1044		1,231.584 2	1,231.584 2	0.1276	0.1977	1,293.684 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0800</b>	<b>2.3343</b>	<b>1.2433</b>	<b>0.0122</b>	<b>0.4839</b>	<b>0.0165</b>	<b>0.5004</b>	<b>0.1318</b>	<b>0.0157</b>	<b>0.1475</b>		<b>1,372.897 4</b>	<b>1,372.897 4</b>	<b>0.1305</b>	<b>0.2006</b>	<b>1,435.930 0</b>

**3.3 Site Preparation - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.2294</b>	<b>20.8864</b>	<b>10.1025</b>	<b>1.1310</b>	<b>11.2335</b>		<b>3,688.010 0</b>	<b>3,688.010 0</b>	<b>1.1928</b>		<b>3,717.829 4</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0477	0.0292	0.5137	1.6400e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946
<b>Total</b>	<b>0.0477</b>	<b>0.0292</b>	<b>0.5137</b>	<b>1.6400e-003</b>	<b>0.2012</b>	<b>9.8000e-004</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.0000e-004</b>	<b>0.0543</b>		<b>169.5759</b>	<b>169.5759</b>	<b>3.4200e-003</b>	<b>3.4700e-003</b>	<b>170.6946</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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
<b>Total</b>	<b>0.4656</b>	<b>2.0175</b>	<b>20.8690</b>	<b>0.0381</b>	<b>8.4034</b>	<b>0.0621</b>	<b>8.4655</b>	<b>4.3188</b>	<b>0.0621</b>	<b>4.3809</b>	<b>0.0000</b>	<b>3,688.0100</b>	<b>3,688.0100</b>	<b>1.1928</b>		<b>3,717.8294</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0477	0.0292	0.5137	1.6400e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946
<b>Total</b>	<b>0.0477</b>	<b>0.0292</b>	<b>0.5137</b>	<b>1.6400e-003</b>	<b>0.1907</b>	<b>9.8000e-004</b>	<b>0.1917</b>	<b>0.0508</b>	<b>9.0000e-004</b>	<b>0.0517</b>		<b>169.5759</b>	<b>169.5759</b>	<b>3.4200e-003</b>	<b>3.4700e-003</b>	<b>170.6946</b>

**3.4 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.054 1	2,873.054 1	0.9292		2,896.284 2
<b>Total</b>	<b>1.6617</b>	<b>17.0310</b>	<b>14.7594</b>	<b>0.0297</b>	<b>7.0826</b>	<b>0.7244</b>	<b>7.8070</b>	<b>3.4247</b>	<b>0.6665</b>	<b>4.0912</b>		<b>2,873.054 1</b>	<b>2,873.054 1</b>	<b>0.9292</b>		<b>2,896.284 2</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0397</b>	<b>0.0243</b>	<b>0.4281</b>	<b>1.3700e-003</b>	<b>0.1677</b>	<b>8.2000e-004</b>	<b>0.1685</b>	<b>0.0445</b>	<b>7.5000e-004</b>	<b>0.0452</b>		<b>141.3132</b>	<b>141.3132</b>	<b>2.8500e-003</b>	<b>2.8900e-003</b>	<b>142.2455</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					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.054 1	2,873.054 1	0.9292		2,896.284 2
<b>Total</b>	<b>0.3632</b>	<b>1.5737</b>	<b>17.7527</b>	<b>0.0297</b>	<b>3.0278</b>	<b>0.0484</b>	<b>3.0762</b>	<b>1.4641</b>	<b>0.0484</b>	<b>1.5125</b>	<b>0.0000</b>	<b>2,873.054 1</b>	<b>2,873.054 1</b>	<b>0.9292</b>		<b>2,896.284 2</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0397</b>	<b>0.0243</b>	<b>0.4281</b>	<b>1.3700e-003</b>	<b>0.1589</b>	<b>8.2000e-004</b>	<b>0.1597</b>	<b>0.0423</b>	<b>7.5000e-004</b>	<b>0.0431</b>		<b>141.3132</b>	<b>141.3132</b>	<b>2.8500e-003</b>	<b>2.8900e-003</b>	<b>142.2455</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0507	1.7821	0.7356	9.0100e-003	0.3261	9.6000e-003	0.3357	0.0939	9.1800e-003	0.1030		991.3705	991.3705	0.0605	0.1429	1,035.4529
Worker	0.3470	0.2122	3.7388	0.0120	1.4643	7.1300e-003	1.4714	0.3883	6.5600e-003	0.3949		1,234.1354	1,234.1354	0.0249	0.0252	1,242.2771
<b>Total</b>	<b>0.3977</b>	<b>1.9943</b>	<b>4.4744</b>	<b>0.0210</b>	<b>1.7904</b>	<b>0.0167</b>	<b>1.8071</b>	<b>0.4822</b>	<b>0.0157</b>	<b>0.4979</b>		<b>2,225.5059</b>	<b>2,225.5059</b>	<b>0.0854</b>	<b>0.1681</b>	<b>2,277.7299</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	0.9674	7.6684	16.5131	0.0270		0.3066	0.3066		0.2964	0.2964	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>0.9674</b>	<b>7.6684</b>	<b>16.5131</b>	<b>0.0270</b>		<b>0.3066</b>	<b>0.3066</b>		<b>0.2964</b>	<b>0.2964</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0507	1.7821	0.7356	9.0100e-003	0.3121	9.6000e-003	0.3217	0.0904	9.1800e-003	0.0996		991.3705	991.3705	0.0605	0.1429	1,035.4529
Worker	0.3470	0.2122	3.7388	0.0120	1.3879	7.1300e-003	1.3950	0.3696	6.5600e-003	0.3761		1,234.1354	1,234.1354	0.0249	0.0252	1,242.2771
<b>Total</b>	<b>0.3977</b>	<b>1.9943</b>	<b>4.4744</b>	<b>0.0210</b>	<b>1.7000</b>	<b>0.0167</b>	<b>1.7168</b>	<b>0.4600</b>	<b>0.0157</b>	<b>0.4757</b>		<b>2,225.5059</b>	<b>2,225.5059</b>	<b>0.0854</b>	<b>0.1681</b>	<b>2,277.7299</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.4148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4030</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0397</b>	<b>0.0243</b>	<b>0.4281</b>	<b>1.3700e-003</b>	<b>0.1677</b>	<b>8.2000e-004</b>	<b>0.1685</b>	<b>0.0445</b>	<b>7.5000e-004</b>	<b>0.0452</b>		<b>141.3132</b>	<b>141.3132</b>	<b>2.8500e-003</b>	<b>2.8900e-003</b>	<b>142.2455</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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.4148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6953</b>	<b>1.2154</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0374</b>	<b>0.0374</b>		<b>0.0374</b>	<b>0.0374</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0397	0.0243	0.4281	1.3700e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		141.3132	141.3132	2.8500e-003	2.8900e-003	142.2455
<b>Total</b>	<b>0.0397</b>	<b>0.0243</b>	<b>0.4281</b>	<b>1.3700e-003</b>	<b>0.1589</b>	<b>8.2000e-004</b>	<b>0.1597</b>	<b>0.0423</b>	<b>7.5000e-004</b>	<b>0.0431</b>		<b>141.3132</b>	<b>141.3132</b>	<b>2.8500e-003</b>	<b>2.8900e-003</b>	<b>142.2455</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>21.4003</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0689	0.0421	0.7421	2.3700e-003	0.2906	1.4100e-003	0.2920	0.0771	1.3000e-003	0.0784		244.9429	244.9429	4.9400e-003	5.0100e-003	246.5588
<b>Total</b>	<b>0.0689</b>	<b>0.0421</b>	<b>0.7421</b>	<b>2.3700e-003</b>	<b>0.2906</b>	<b>1.4100e-003</b>	<b>0.2920</b>	<b>0.0771</b>	<b>1.3000e-003</b>	<b>0.0784</b>		<b>244.9429</b>	<b>244.9429</b>	<b>4.9400e-003</b>	<b>5.0100e-003</b>	<b>246.5588</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					
Archit. Coating	21.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>21.4003</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0689	0.0421	0.7421	2.3700e-003	0.2755	1.4100e-003	0.2769	0.0734	1.3000e-003	0.0747		244.9429	244.9429	4.9400e-003	5.0100e-003	246.5588
<b>Total</b>	<b>0.0689</b>	<b>0.0421</b>	<b>0.7421</b>	<b>2.3700e-003</b>	<b>0.2755</b>	<b>1.4100e-003</b>	<b>0.2769</b>	<b>0.0734</b>	<b>1.3000e-003</b>	<b>0.0747</b>		<b>244.9429</b>	<b>244.9429</b>	<b>4.9400e-003</b>	<b>5.0100e-003</b>	<b>246.5588</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.5136	5.8251	25.4493	0.0782	7.1336	0.0653	7.1989	1.9156	0.0614	1.9770		8,235.547 1	8,235.547 1	0.4960	0.5477	8,411.156 6
Unmitigated	2.5136	5.8251	25.4493	0.0782	7.1336	0.0653	7.1989	1.9156	0.0614	1.9770		8,235.547 1	8,235.547 1	0.4960	0.5477	8,411.156 6

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	928.00	928.00	928.00	2,989,516	2,989,516
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	28.00	28.00	28.00	338,368	338,368
<b>Total</b>	<b>956.00</b>	<b>956.00</b>	<b>956.00</b>	<b>3,327,884</b>	<b>3,327,884</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	33.20	0.00	0.00	100.00	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.270000	0.230000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000
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**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	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
NaturalGas Unmitigated	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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					
General Office Building	123.973	1.3400e-003	0.0122	0.0102	7.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		14.5850	14.5850	2.8000e-004	2.7000e-004	14.6717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1528.72	0.0165	0.1499	0.1259	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.8490	179.8490	3.4500e-003	3.3000e-003	180.9178
<b>Total</b>		<b>0.0178</b>	<b>0.1620</b>	<b>0.1361</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.4340</b>	<b>194.4340</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.5895</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.123973	1.3400e-003	0.0122	0.0102	7.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		14.5850	14.5850	2.8000e-004	2.7000e-004	14.6717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.52872	0.0165	0.1499	0.1259	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.8490	179.8490	3.4500e-003	3.3000e-003	180.9178
<b>Total</b>		<b>0.0178</b>	<b>0.1620</b>	<b>0.1361</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.4340</b>	<b>194.4340</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.5895</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Unmitigated	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729

**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	0.3895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9400e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
<b>Total</b>	<b>3.3897</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0684</b>	<b>0.0684</b>	<b>1.8000e-004</b>		<b>0.0729</b>

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9400e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
<b>Total</b>	<b>3.3897</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0684</b>	<b>0.0684</b>	<b>1.8000e-004</b>		<b>0.0729</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Myford II - Orange County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**Myford II  
Orange County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Unrefrigerated Warehouse-No Rail	143.44	1000sqft	3.29	143,440.00	0
Parking Lot	164.22	1000sqft	3.78	164,220.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	30
<b>Climate Zone</b>	8			<b>Operational Year</b>	2024
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	390.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

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

Project Characteristics -

Land Use - building area

Construction Phase - anticipated schedule

Trips and VMT - Demolished material hauled to Frank R. Bowerman Landfill, approximately 7.9 miles from site.

Demolition -

Grading -

Vehicle Trips - Office = 928 daily passenger car trips, Warehouse = 28 daily truck trips

Construction Off-road Equipment Mitigation - SCAQMD Rule 403

Fleet Mix - office = passenger cars, warehouse = trucks

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	230.00	110.00
tblConstructionPhase	NumDays	20.00	61.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	4.00
tblConstructionPhase	PhaseEndDate	3/21/2025	11/12/2024
tblConstructionPhase	PhaseEndDate	1/24/2025	10/25/2024
tblConstructionPhase	PhaseEndDate	1/26/2024	3/25/2024

## Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblConstructionPhase	PhaseEndDate	3/8/2024	5/24/2024
tblConstructionPhase	PhaseEndDate	2/21/2025	11/5/2024
tblConstructionPhase	PhaseEndDate	2/9/2024	3/29/2024
tblConstructionPhase	PhaseStartDate	2/22/2025	8/12/2024
tblConstructionPhase	PhaseStartDate	3/9/2024	5/25/2024
tblConstructionPhase	PhaseStartDate	2/10/2024	4/1/2024
tblConstructionPhase	PhaseStartDate	1/25/2025	10/26/2024
tblConstructionPhase	PhaseStartDate	1/27/2024	3/26/2024
tblFleetMix	HHD	4.9060e-003	0.50
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.6050e-003	0.27
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	3.8690e-003	0.00
tblFleetMix	MHD	0.01	0.23
tblFleetMix	OBUS	6.5700e-004	0.00
tblFleetMix	SBUS	7.1300e-004	0.00
tblFleetMix	UBUS	3.8100e-004	0.00
tblLandUse	LotAcreage	3.77	3.78
tblVehicleTrips	CNW_TL	6.90	33.20
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.21	185.60

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

tblVehicleTrips	ST_TR	1.74	0.20
tblVehicleTrips	SU_TR	0.70	185.60
tblVehicleTrips	SU_TR	1.74	0.20
tblVehicleTrips	WD_TR	9.74	185.60
tblVehicleTrips	WD_TR	1.74	0.20

**2.0 Emissions Summary**

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Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Energy	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
Mobile	2.4954	6.1421	25.2046	0.0760	7.1336	0.0654	7.1989	1.9156	0.0615	1.9771		8,008.5410	8,008.5410	0.5071	0.5577	8,187.4053
<b>Total</b>	<b>5.9030</b>	<b>6.3045</b>	<b>25.3725</b>	<b>0.0770</b>	<b>7.1336</b>	<b>0.0778</b>	<b>7.2114</b>	<b>1.9156</b>	<b>0.0739</b>	<b>1.9895</b>		<b>8,203.0434</b>	<b>8,203.0434</b>	<b>0.5110</b>	<b>0.5612</b>	<b>8,383.0677</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Energy	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
Mobile	2.4954	6.1421	25.2046	0.0760	7.1336	0.0654	7.1989	1.9156	0.0615	1.9771		8,008.5410	8,008.5410	0.5071	0.5577	8,187.4053
<b>Total</b>	<b>5.9030</b>	<b>6.3045</b>	<b>25.3725</b>	<b>0.0770</b>	<b>7.1336</b>	<b>0.0778</b>	<b>7.2114</b>	<b>1.9156</b>	<b>0.0739</b>	<b>1.9895</b>		<b>8,203.0434</b>	<b>8,203.0434</b>	<b>0.5110</b>	<b>0.5612</b>	<b>8,383.0677</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	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	1/1/2024	3/25/2024	5	61	
2	Site Preparation	Site Preparation	3/26/2024	3/29/2024	5	4	
3	Grading	Grading	4/1/2024	5/24/2024	5	40	
4	Building Construction	Building Construction	5/25/2024	10/25/2024	5	110	
5	Paving	Paving	10/26/2024	11/5/2024	5	7	
6	Architectural Coating	Architectural Coating	8/12/2024	11/12/2024	5	67	

**Acres of Grading (Site Preparation Phase): 6**

**Acres of Grading (Grading Phase): 40**

**Acres of Paving: 3.78**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,660; Non-Residential Outdoor: 74,220; Striped Parking Area: 9,853 (Architectural Coating – sqft)**

**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

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	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
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**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	1,191.00	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	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	131.00	51.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Demolition - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.2272	0.0000	4.2272	0.6400	0.0000	0.6400			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>2.2437</b>	<b>20.8781</b>	<b>19.7073</b>	<b>0.0388</b>	<b>4.2272</b>	<b>0.9602</b>	<b>5.1873</b>	<b>0.6400</b>	<b>0.8922</b>	<b>1.5322</b>		<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	2.4085	0.8238	0.0108	0.3405	0.0157	0.3562	0.0932	0.0150	0.1082		1,232.7179	1,232.7179	0.1274	0.1979	1,294.8699
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0814</b>	<b>2.4352</b>	<b>1.2230</b>	<b>0.0121</b>	<b>0.5082</b>	<b>0.0165</b>	<b>0.5246</b>	<b>0.1377</b>	<b>0.0157</b>	<b>0.1535</b>		<b>1,367.2852</b>	<b>1,367.2852</b>	<b>0.1304</b>	<b>0.2009</b>	<b>1,430.4260</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					1.8071	0.0000	1.8071	0.2736	0.0000	0.2736			0.0000			0.0000
Off-Road	0.7126	4.1463	23.0713	0.0388		0.1638	0.1638		0.1638	0.1638	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
<b>Total</b>	<b>0.7126</b>	<b>4.1463</b>	<b>23.0713</b>	<b>0.0388</b>	<b>1.8071</b>	<b>0.1638</b>	<b>1.9710</b>	<b>0.2736</b>	<b>0.1638</b>	<b>0.4375</b>	<b>0.0000</b>	<b>3,747.4228</b>	<b>3,747.4228</b>	<b>1.0485</b>		<b>3,773.6345</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.2 Demolition - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0378	2.4085	0.8238	0.0108	0.3250	0.0157	0.3407	0.0894	0.0150	0.1044		1,232.7179	1,232.7179	0.1274	0.1979	1,294.8699
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0814</b>	<b>2.4352</b>	<b>1.2230</b>	<b>0.0121</b>	<b>0.4839</b>	<b>0.0165</b>	<b>0.5004</b>	<b>0.1318</b>	<b>0.0157</b>	<b>0.1475</b>		<b>1,367.2852</b>	<b>1,367.2852</b>	<b>0.1304</b>	<b>0.2009</b>	<b>1,430.4260</b>

**3.3 Site Preparation - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
<b>Total</b>	<b>2.6609</b>	<b>27.1760</b>	<b>18.3356</b>	<b>0.0381</b>	<b>19.6570</b>	<b>1.2294</b>	<b>20.8864</b>	<b>10.1025</b>	<b>1.1310</b>	<b>11.2335</b>		<b>3,688.0100</b>	<b>3,688.0100</b>	<b>1.1928</b>		<b>3,717.8294</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0523	0.0320	0.4791	1.5700e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674
<b>Total</b>	<b>0.0523</b>	<b>0.0320</b>	<b>0.4791</b>	<b>1.5700e-003</b>	<b>0.2012</b>	<b>9.8000e-004</b>	<b>0.2022</b>	<b>0.0534</b>	<b>9.0000e-004</b>	<b>0.0543</b>		<b>161.4808</b>	<b>161.4808</b>	<b>3.5100e-003</b>	<b>3.6900e-003</b>	<b>162.6674</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					8.4034	0.0000	8.4034	4.3188	0.0000	4.3188			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
<b>Total</b>	<b>0.4656</b>	<b>2.0175</b>	<b>20.8690</b>	<b>0.0381</b>	<b>8.4034</b>	<b>0.0621</b>	<b>8.4655</b>	<b>4.3188</b>	<b>0.0621</b>	<b>4.3809</b>	<b>0.0000</b>	<b>3,688.0100</b>	<b>3,688.0100</b>	<b>1.1928</b>		<b>3,717.8294</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.3 Site Preparation - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0523	0.0320	0.4791	1.5700e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674
<b>Total</b>	<b>0.0523</b>	<b>0.0320</b>	<b>0.4791</b>	<b>1.5700e-003</b>	<b>0.1907</b>	<b>9.8000e-004</b>	<b>0.1917</b>	<b>0.0508</b>	<b>9.0000e-004</b>	<b>0.0517</b>		<b>161.4808</b>	<b>161.4808</b>	<b>3.5100e-003</b>	<b>3.6900e-003</b>	<b>162.6674</b>

**3.4 Grading - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.054 1	2,873.054 1	0.9292		2,896.284 2
<b>Total</b>	<b>1.6617</b>	<b>17.0310</b>	<b>14.7594</b>	<b>0.0297</b>	<b>7.0826</b>	<b>0.7244</b>	<b>7.8070</b>	<b>3.4247</b>	<b>0.6665</b>	<b>4.0912</b>		<b>2,873.054 1</b>	<b>2,873.054 1</b>	<b>0.9292</b>		<b>2,896.284 2</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0436</b>	<b>0.0267</b>	<b>0.3993</b>	<b>1.3000e-003</b>	<b>0.1677</b>	<b>8.2000e-004</b>	<b>0.1685</b>	<b>0.0445</b>	<b>7.5000e-004</b>	<b>0.0452</b>		<b>134.5673</b>	<b>134.5673</b>	<b>2.9200e-003</b>	<b>3.0700e-003</b>	<b>135.5562</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					3.0278	0.0000	3.0278	1.4641	0.0000	1.4641			0.0000			0.0000
Off-Road	0.3632	1.5737	17.7527	0.0297		0.0484	0.0484		0.0484	0.0484	0.0000	2,873.054 1	2,873.054 1	0.9292		2,896.284 2
<b>Total</b>	<b>0.3632</b>	<b>1.5737</b>	<b>17.7527</b>	<b>0.0297</b>	<b>3.0278</b>	<b>0.0484</b>	<b>3.0762</b>	<b>1.4641</b>	<b>0.0484</b>	<b>1.5125</b>	<b>0.0000</b>	<b>2,873.054 1</b>	<b>2,873.054 1</b>	<b>0.9292</b>		<b>2,896.284 2</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.4 Grading - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0436</b>	<b>0.0267</b>	<b>0.3993</b>	<b>1.3000e-003</b>	<b>0.1589</b>	<b>8.2000e-004</b>	<b>0.1597</b>	<b>0.0423</b>	<b>7.5000e-004</b>	<b>0.0431</b>		<b>134.5673</b>	<b>134.5673</b>	<b>2.9200e-003</b>	<b>3.0700e-003</b>	<b>135.5562</b>

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0489	1.8617	0.7587	9.0200e-003	0.3261	9.6500e-003	0.3358	0.0939	9.2300e-003	0.1031		992.8645	992.8645	0.0604	0.1432	1,037.0389
Worker	0.3805	0.2329	3.4868	0.0114	1.4643	7.1300e-003	1.4714	0.3883	6.5600e-003	0.3949		1,175.2212	1,175.2212	0.0255	0.0268	1,183.8572
<b>Total</b>	<b>0.4294</b>	<b>2.0947</b>	<b>4.2455</b>	<b>0.0204</b>	<b>1.7904</b>	<b>0.0168</b>	<b>1.8072</b>	<b>0.4822</b>	<b>0.0158</b>	<b>0.4980</b>		<b>2,168.0858</b>	<b>2,168.0858</b>	<b>0.0859</b>	<b>0.1700</b>	<b>2,220.8961</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	0.9674	7.6684	16.5131	0.0270		0.3066	0.3066		0.2964	0.2964	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>0.9674</b>	<b>7.6684</b>	<b>16.5131</b>	<b>0.0270</b>		<b>0.3066</b>	<b>0.3066</b>		<b>0.2964</b>	<b>0.2964</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0489	1.8617	0.7587	9.0200e-003	0.3121	9.6500e-003	0.3218	0.0904	9.2300e-003	0.0997		992.8645	992.8645	0.0604	0.1432	1,037.0389
Worker	0.3805	0.2329	3.4868	0.0114	1.3879	7.1300e-003	1.3950	0.3696	6.5600e-003	0.3761		1,175.2212	1,175.2212	0.0255	0.0268	1,183.8572
<b>Total</b>	<b>0.4294</b>	<b>2.0947</b>	<b>4.2455</b>	<b>0.0204</b>	<b>1.7000</b>	<b>0.0168</b>	<b>1.7168</b>	<b>0.4600</b>	<b>0.0158</b>	<b>0.4758</b>		<b>2,168.0858</b>	<b>2,168.0858</b>	<b>0.0859</b>	<b>0.1700</b>	<b>2,220.8961</b>

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.4148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.4030</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>		<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1677	8.2000e-004	0.1685	0.0445	7.5000e-004	0.0452		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0436</b>	<b>0.0267</b>	<b>0.3993</b>	<b>1.3000e-003</b>	<b>0.1677</b>	<b>8.2000e-004</b>	<b>0.1685</b>	<b>0.0445</b>	<b>7.5000e-004</b>	<b>0.0452</b>		<b>134.5673</b>	<b>134.5673</b>	<b>2.9200e-003</b>	<b>3.0700e-003</b>	<b>135.5562</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	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	1.4148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.6953</b>	<b>1.2154</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0374</b>	<b>0.0374</b>		<b>0.0374</b>	<b>0.0374</b>	<b>0.0000</b>	<b>2,207.5472</b>	<b>2,207.5472</b>	<b>0.7140</b>		<b>2,225.3963</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0436	0.0267	0.3993	1.3000e-003	0.1589	8.2000e-004	0.1597	0.0423	7.5000e-004	0.0431		134.5673	134.5673	2.9200e-003	3.0700e-003	135.5562
<b>Total</b>	<b>0.0436</b>	<b>0.0267</b>	<b>0.3993</b>	<b>1.3000e-003</b>	<b>0.1589</b>	<b>8.2000e-004</b>	<b>0.1597</b>	<b>0.0423</b>	<b>7.5000e-004</b>	<b>0.0431</b>		<b>134.5673</b>	<b>134.5673</b>	<b>2.9200e-003</b>	<b>3.0700e-003</b>	<b>135.5562</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	21.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>21.4003</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0755	0.0462	0.6920	2.2600e-003	0.2906	1.4100e-003	0.2920	0.0771	1.3000e-003	0.0784		233.2500	233.2500	5.0700e-003	5.3300e-003	234.9640
<b>Total</b>	<b>0.0755</b>	<b>0.0462</b>	<b>0.6920</b>	<b>2.2600e-003</b>	<b>0.2906</b>	<b>1.4100e-003</b>	<b>0.2920</b>	<b>0.0771</b>	<b>1.3000e-003</b>	<b>0.0784</b>		<b>233.2500</b>	<b>233.2500</b>	<b>5.0700e-003</b>	<b>5.3300e-003</b>	<b>234.9640</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					
Archit. Coating	21.2195					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>21.4003</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0755	0.0462	0.6920	2.2600e-003	0.2755	1.4100e-003	0.2769	0.0734	1.3000e-003	0.0747		233.2500	233.2500	5.0700e-003	5.3300e-003	234.9640
<b>Total</b>	<b>0.0755</b>	<b>0.0462</b>	<b>0.6920</b>	<b>2.2600e-003</b>	<b>0.2755</b>	<b>1.4100e-003</b>	<b>0.2769</b>	<b>0.0734</b>	<b>1.3000e-003</b>	<b>0.0747</b>		<b>233.2500</b>	<b>233.2500</b>	<b>5.0700e-003</b>	<b>5.3300e-003</b>	<b>234.9640</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.4954	6.1421	25.2046	0.0760	7.1336	0.0654	7.1989	1.9156	0.0615	1.9771		8,008.5410	8,008.5410	0.5071	0.5577	8,187.4053
Unmitigated	2.4954	6.1421	25.2046	0.0760	7.1336	0.0654	7.1989	1.9156	0.0615	1.9771		8,008.5410	8,008.5410	0.5071	0.5577	8,187.4053

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	928.00	928.00	928.00	2,989,516	2,989,516
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	28.00	28.00	28.00	338,368	338,368
<b>Total</b>	<b>956.00</b>	<b>956.00</b>	<b>956.00</b>	<b>3,327,884</b>	<b>3,327,884</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	33.20	0.00	0.00	100.00	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.270000	0.230000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000
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**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	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895
NaturalGas Unmitigated	0.0178	0.1620	0.1361	9.7000e-004		0.0123	0.0123		0.0123	0.0123		194.4340	194.4340	3.7300e-003	3.5600e-003	195.5895

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**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					
General Office Building	123.973	1.3400e-003	0.0122	0.0102	7.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		14.5850	14.5850	2.8000e-004	2.7000e-004	14.6717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1528.72	0.0165	0.1499	0.1259	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.8490	179.8490	3.4500e-003	3.3000e-003	180.9178
<b>Total</b>		<b>0.0178</b>	<b>0.1620</b>	<b>0.1361</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.4340</b>	<b>194.4340</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.5895</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.123973	1.3400e-003	0.0122	0.0102	7.0000e-005		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004		14.5850	14.5850	2.8000e-004	2.7000e-004	14.6717
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.52872	0.0165	0.1499	0.1259	9.0000e-004		0.0114	0.0114		0.0114	0.0114		179.8490	179.8490	3.4500e-003	3.3000e-003	180.9178
<b>Total</b>		<b>0.0178</b>	<b>0.1620</b>	<b>0.1361</b>	<b>9.7000e-004</b>		<b>0.0123</b>	<b>0.0123</b>		<b>0.0123</b>	<b>0.0123</b>		<b>194.4340</b>	<b>194.4340</b>	<b>3.7300e-003</b>	<b>3.5700e-003</b>	<b>195.5895</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
Unmitigated	3.3897	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729

**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	0.3895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9400e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
<b>Total</b>	<b>3.3897</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0684</b>	<b>0.0684</b>	<b>1.8000e-004</b>		<b>0.0729</b>

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3895					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9400e-003	2.9000e-004	0.0319	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0684	0.0684	1.8000e-004		0.0729
<b>Total</b>	<b>3.3897</b>	<b>2.9000e-004</b>	<b>0.0319</b>	<b>0.0000</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>0.0684</b>	<b>0.0684</b>	<b>1.8000e-004</b>		<b>0.0729</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Myford II - Orange County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

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Model Output: OFFROAD2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Orange (SC)

Calendar Year: 2024

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consum	Total_Activit	Total_Population	Horsepower_Hours_hphp
Orange (SC)	2024	Industrial - Forklifts	Aggregate	100	Diesel	0.0139056	0.0168258	0.0200241	0.2084938	0.1586719	30.400377	0.009074	0.0083484	0.00028	0.000248	986306.761	1152811	1479.239916	95022895.61

g/hph

Year	HC	ROG	TOG	CO	Nox	CO2	PM10	PM2.5	Sox	NH3	Fuel_gphr
2024	0.0484571	0.0586331	0.0697782	0.7265422	0.5529269	105.93674	0.031622	0.0290918	0.00098	0.000865	3437000.98

Project Forklifts 3  
 HP 89  
 Hours per Day 12  
 Days per Year 365  
 1 pound = 453.5924 grams

Emissions Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	MT/yr	PM10 tons/yr
Forklifts	0.41	3.91	5.13	0.01	0.22	0.21	748	124	0.041

Based on aggregated emission rates obtained from CARB OFFROAD Version 1.0.2.

Number of forklifts per SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

Model Output: OFFROAD2021 (v1.0.2) Emissions Inventory

Region Type: Sub-Area

Region: Orange (SC)

Calendar Year: 2024

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2021 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Ye	Vehicle Category	Model Year	Horsepower	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumption	Total_Activi	Total_Popul	Horsepower_Hours
Orange (SC)	2024	Airport Ground Support - Aggregate		175	Diesel	2.177E-05	2.634E-05	3.135E-05	0.0003289	0.0002225	0.0539645	1.29548E-05	1.19184E-05	4.98275E-07	4.40451E-07	1750.817741	650.73461	0.9590834	93600.15472
Orange (SC)	2024	Airport Ground Support - Aggregate		300	Diesel	2.253E-05	2.726E-05	3.244E-05	0.0001698	0.0002577	0.0788316	8.6133E-06	7.92423E-06	7.28161E-07	6.43413E-07	2557.604288	629.89947	0.9590834	136730.3408
Orange (SC)	2024	Airport Ground Support - Aggregate		175	Nat Gas	0	0	3.062E-06	0.0025063	0.0002772	0.0955617	0	0	0	0	5161.1	558.45	3.55	86894.82

g/hph

	HC	ROG	TOG	CO	Nox	CO2	PM10	PM2.5	Sox	NH3	Fuel_gphr
2024	0.0770191	0.0931931	0.1109075	1.1636382	0.7870103	190.90937	0.045830084	0.042163677	0.001762741	0.001558177	6193844.215
2024	0.0545517	0.0660076	0.0785545	0.4111519	0.6240925	190.91116	0.020859334	0.019190587	0.001763432	0.001558191	6193902.447
2024	0	0	0.0116681	9.5507288	1.0564573	364.15463	0	0	0	0	19667279.6
2024	0.0738677	0.08938	0.1063695	1.1160261	0.7548085	183.098	0.043954871	0.040438482	0.001690616	0.001494421	5940412.958
	0.0523197	0.0633068	0.0753403	0.394329	0.5985568	183.09972	0.02000584	0.018405373	0.001691278	0.001494435	5940468.807
	0	0	0.0414219	33.905087	3.7504235	1292.7489	0	0	0	0	69818842.58
	0.1261874	0.1526868	0.2231317	35.415442	5.1037888	1658.9466	0.063960711	0.058843854	0.003381894	0.002988857	81699724.35
	0.0230767	0.0279228	0.0408056	6.4766573	0.9333638	303.3826	0.01169692	0.010761167	0.000618469	0.000546592	14940971.69

Yard Trucks 1  
 HP 190  
 Hours per Day 12  
 Days per Year 365  
 1 pound = 453.5924 grams

Emissions Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	MT/yr	PM10 tons/yr
Yard Trucks	0.14	4.69	32.56	0.00	0.06	0.05	1524.96	252	0.011

Based on aggregated emission rates obtained from CARB OFFROAD Version 1.0.2.

Number of yard trucks/hostlers per SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results, June 2014.

**Emergency Backup Generator Emissions**

	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	1	750	0.74	50	1	750	37,500

**Emissions Rates (g/hp-hr)**

ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	TOG	HC
1.02058266	2.85	2.6	0.00494	0.15	0.15	0.15	1.124908885	0.14

From CalEEMod Guide Appenix D, Table 12.1

**Emissions (pounds/day)**

ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	TOG	HC
1.69	4.71	4.30	0.01	0.25	0.25	0.25	1.86	0.23

**Emissions (tons/year)**

ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	PM	TOG	HC
0.04	0.12	0.11	0.00	0.01	0.01	0.01	0.05	0.01

**GHG Emissions (metric tons)**

CO <sub>2</sub>
19.56