

AIR QUALITY ASSESSMENT

**Jamul Commercial Development
County of San Diego, CA**

Lead Agency:

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COMMON ACRONYMS

Air Quality Impact Assessments (AQIA)
Assembly Bill 32 (AB32)
California Air Resource Board (CARB)
California Ambient Air Quality Standards (CAAQS)
California Environmental Quality Act (CEQA)
Carbon Dioxide (CO₂)
Cubic Yards (CY)
Diesel Particulate Matter (DPM)
Environmental Protection Agency (EPA)
EPA Office of Air Quality Planning and Standards (OAQPS)
Hazardous Air Pollutants (HAPs)
Hydrogen Sulfide (H₂S)
International Residential Code (IRC)
Level of Service (LOS)
Low Carbon Fuel Standard (LCFS)
Methane (CH₄)
National ambient air quality standards (NAAQS)
Nitrous Oxide (N₂O)
North County Transit District (NCTD)
Reactive Organic Gas (ROG)
Regional Air Quality Strategy (RAQS)
San Diego Air Basin (SDAB)
San Diego Air Pollution Control District (SDAPCD)
South Coast Air Quality Management District (SCAQMD)
Specific Plan Area (SPA)
State Implementation Plan (SIP)
Toxic Air Contaminants (TACs)
Vehicle Miles Traveled (VMT)

EXECUTIVE SUMMARY

This air quality impact study has been completed to determine the air quality impacts associated with the development of the proposed Jamul Commercial project. The Jamul Commercial project consists of a Tractor Supply Company store of 18,800 square feet (SF). and separate self-storage facility with up to 600 storage units/vaults and up to 0.5 acres of outdoor RV/Boat parking. The proposed development site is located at 3018 Jefferson Road in the County of San Diego within the Community of Jamul, California.

All construction phases of the proposed Project are anticipated to start in early 2019 and full buildout is expected sometime mid 2020 with full operations expected in 2021

Based upon the analysis of construction and operation activities for the proposed project, direct operational or direct construction impacts would not be expected. The project would likely generate temporary construction odors from equipment and paving though these odors would be short term and would not be considered an impact. Long term odor impacts would not be expected from this project. Furthermore, health risk impacts were analyzed and it was found that estimated cancer risk would be less than 10 in one million exposed which is not significant. It should be noted that implementation of the following design feature will be a condition to the approval of this project.

1. The project would install 100% LED lighting for both interior and exterior lighting and will install smart meters.
2. The project would install Low Flow water fixtures in all the units.
3. The Project would provide separate waste containers to allow for simpler material separations or the Project would pay for a waste collection service that recycles the materials in accordance with AB 341 to achieve a 75% waste diversion. All green waste will be diverted from landfills and recycled as mulch.
4. The project would install 3 EV Charging Stations.
5. All construction diesel equipment would be Tier IV compliant and shall include Diesel Particulate Filters (DPF).

The proposed project would not be expected to generate cumulative construction impacts. The current zoning of the site is C-36 (General Commercial) and the project does not seek a zoning change. Operationally, the project would not generate any significant direct impacts as the proposed project currently is allowed by an MUP within the existing zoning. Finally, the proposed project has been designed to be consistent with the County's General Plan. Given this, the project would be consistent with the RAQS and SIP.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created by construction, area or operational emissions (short term or long term) from the proposed Project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to bring those impacts to a level that would be considered less than significant.

1.2 Project Location

The proposed development site is located at 3018 Jefferson Road in the County of San Diego within the Community of Jamul, California. The Project is located along the west side of Jefferson Road just south of Lyons Valley Road and northeast of Campo Road. Access to the Project site is provided along Jefferson Road. A general project vicinity map is shown in Figure 1-A on the following page.

1.3 Project Description

The existing site (APN:596-070-60-00) is 19.41-acres in the Jamul-Dulzura Community Plan Area in unincorporated San Diego County. The site has a General Plan Designation of Rural Commercial within a C36 zone and has a "P" designator. The project seeks to subdivide the parcel into two separate lots to develop a tractor supply warehouse and a self-storage facility. Based on the project zoning, the project requires the processing of a Major Use Permit (MUP).

"Parcel 1" of the proposed project would be approximately 7.59 acres in size, of which approximately 0.75 acres will be dedicated to permanent open space. This parcel will be developed with a 18,800 SF Hobby Farm retail store, (Tractor Supply Co.) and would have a 15,000 SF enclosed fenced outdoor display area connected to the main building and an uncontained 6,300 SF. area for additional display. Also, the project would install a storage shed for forage materials. In addition, the project would have 83 parking spaces including three spaces with Electric Vehicle (EV) charging stations.

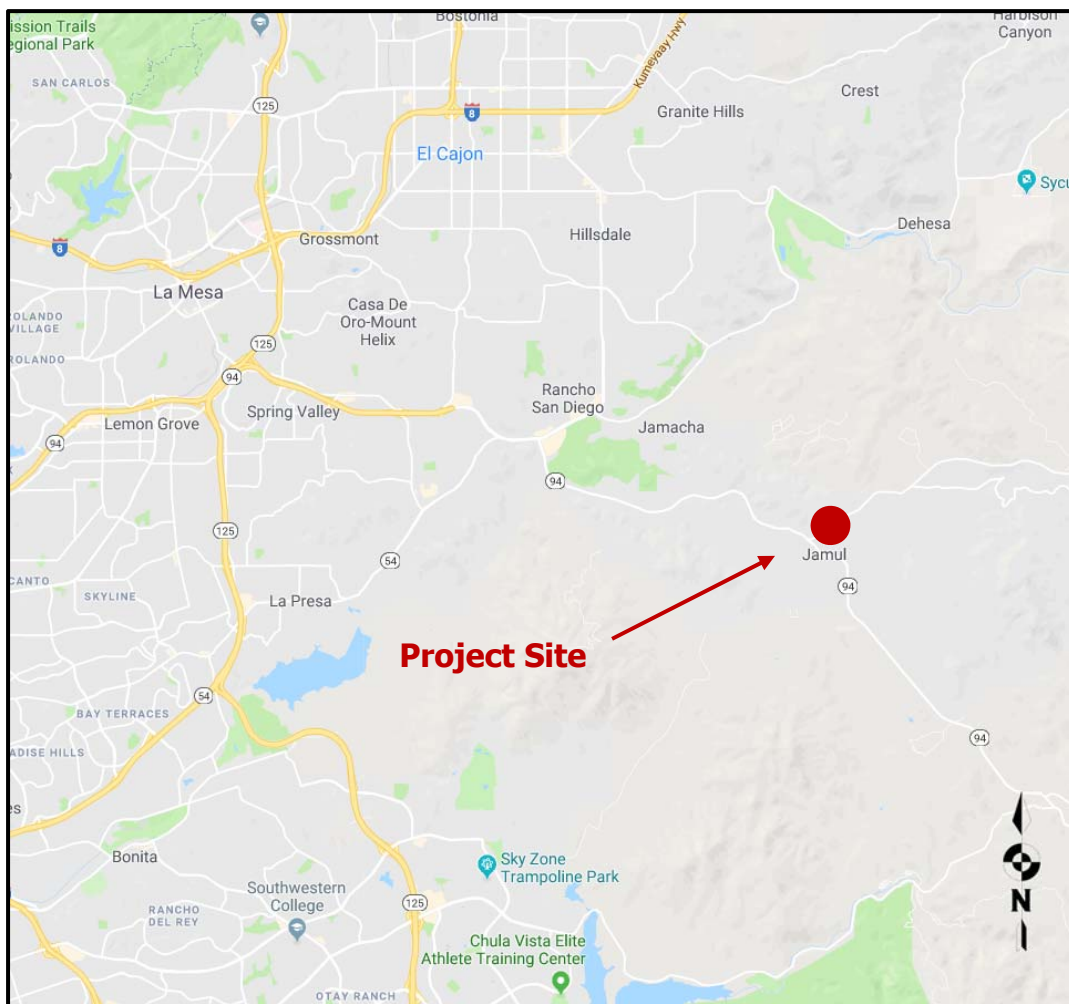
Hours of operation for the Tractor Supply Company would be from 8am to 10pm seven days per week. There are 4-5 employees on-site at any given time during normal business hours with a total of 8-10 employees hired to cover all shifts.

"Parcel 2" of the proposed project is approximately 11.82 acres in size of which approximately 4.57 acres would be dedicated to permanent open space. This parcel will be developed with

an 65,000 SF single story structure for up to 600 self-storage vaults and would contain roughly 1,290 SF administrative area and a parking lot area with nine parking spaces. Also, the site would have a 0.5 acres area for unenclosed RV / boat storage which will be located at the rear of the facility. Self-Storage hours of operation will be from 8am to 5pm daily. There will be 1-2 employees during normal business hours with customer key pad access for after hour entry. Independent access for each parcel will be via a private driveway connecting to Jefferson Road (County maintained).

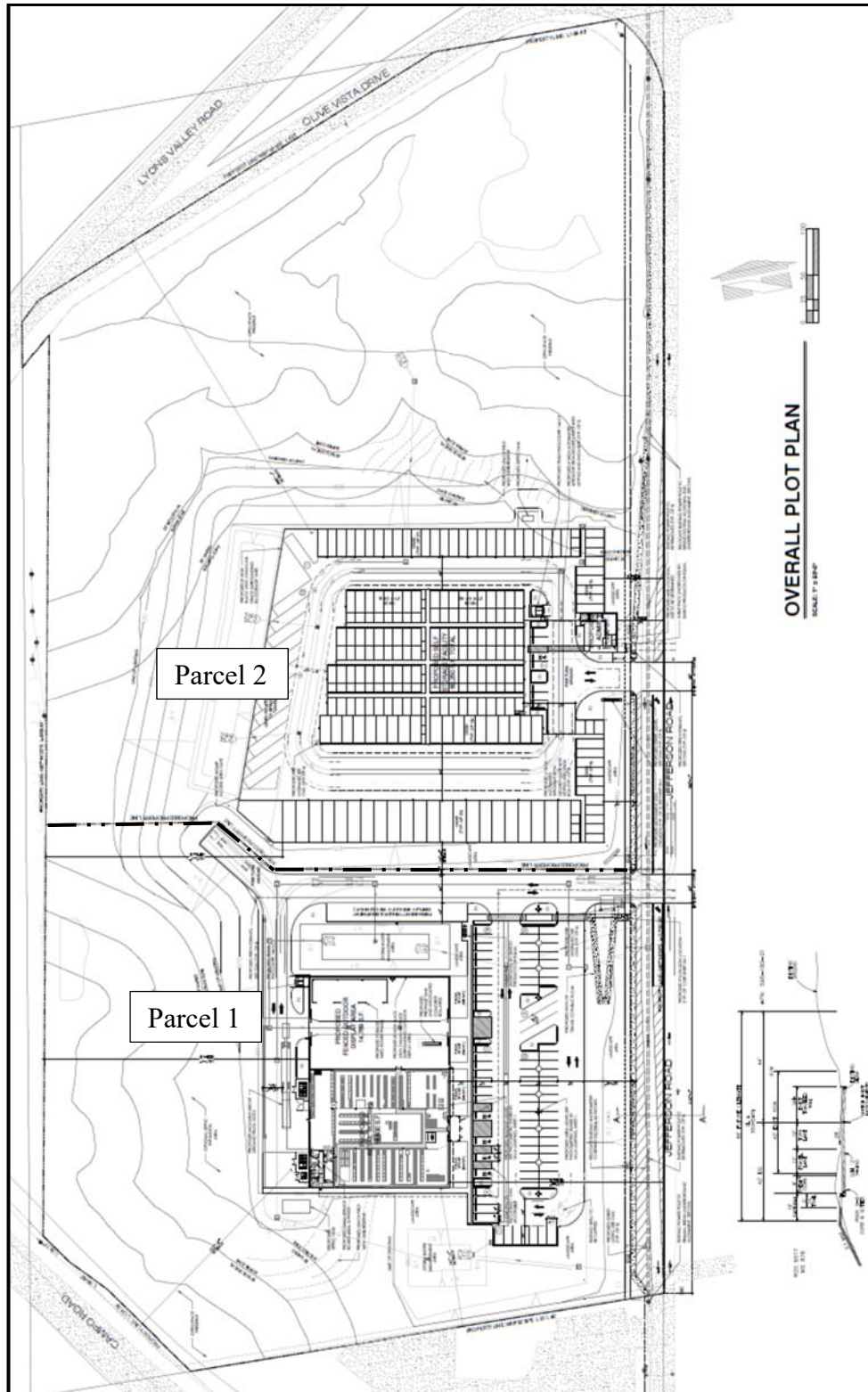
Construction on both parcels would occur simultaneously in roughly 18 months. Earthwork for the overall project will consist of approximately 20,000 cubic yards of cut and approximately 45,000 CY of soil import for fill or approximately 65,000 cubic yards total. The project site plan is shown in Figure 1-B.

Figure 1-A: Project Vicinity Map



Source: (Google, 2018)

Figure 1-B: Proposed Project Site Plan



(Empire Design Group, INC., 2018)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

The currently vacant site is rectangular in shape with approximately 1,300 feet of frontage along Jefferson Road between Campo Road and Lyons Valley Road. There are no structures or significant improvements located on the property. Land uses surrounding the project site include an existing commercial mini-mart / gas station to the south, rural residential to the east and west and commercial to the north. Based on the site plans, elevations onsite range from roughly 915 feet on the western boundary of the project to roughly 990 feet on the eastern boundary of the project with a positively sloped lot from west to east in somewhat of a uniform fashion based upon the project's civil site plans.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB), is largely dominated by the semi-permanent high-pressure system over the Pacific Ocean, known as the Pacific High. This high-pressure ridge over the West Coast often creates a pattern of late-night and early-morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and little temperature variation throughout the year. The climatic classification for San Diego is a warm with dry summers and mild wet winters (County of San Diego, 2007).

Meteorological trends within the El Cajon area generally show daytime highs ranging between 67°F in the winter to approximately 85°F in the summer with August usually being the hottest month. Median temperatures range from approximately 55°F in the winter to approximately 73°F in the summer. Precipitation is generally about 12.9 inches per year (WRCC, 2016). Prevailing wind patterns for the area vary during any given month during the year and also vary depending on the time of day or night. The predominant pattern though throughout the year is usually from the west or westerly (WRCC, 2018).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. **Primary Standards** set limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children and elderly. **Secondary Standards** set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. **Carbon Monoxide (CO):** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. **Lead (Pb):** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. **Nitrogen Dioxide (NO₂):** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO₂ is usually visible as a reddish-brown air layer over urban areas. NO₂ along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO₂ above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO₂ exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.*
4. **Particulate Matter (PM₁₀ or PM_{2.5}):** *is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM₁₀ particles are 10 microns (μm) or less and PM_{2.5} particles are 2.5 (μm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.*
5. **Ozone (O₃):** *is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.*
6. **Sulfur Dioxide (SO₂):** *is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO₂ is also emitted from several industrial processes, such as petroleum*

refining and metal processing. Effects from SO₂ exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO₂ results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.

2.3.2 State Standards and Definitions

The State of California Air Resources Board (CARB) sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) also restrict four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. **Visibility Reducing Particles:** *Particles in the Air that obstruct the visibility.*
2. **Sulfates:** *are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.*
3. **Hydrogen Sulfide (H₂S):** *is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H₂S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H₂S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 Parts per Million (ppm)) can cause a loss of consciousness and possibly death.*
4. **Vinyl Chloride:** *also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).*

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Average Time	California Standards ¹		Federal Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		-		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12 µg/m ³		
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	-	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		-		
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m ³)		0.100 ppm ⁸ (188/ µg/m ³)		
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm ¹⁰ (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) ⁹
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m ³)	
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)	-	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	-	Same as Primary Standard	-
	Calendar Quarter	-		1.5 µg/m ³		
	Rolling 3-Month Average	-		0.15 µg/m ³		
Visibility Reducing Particles	8 Hour	See footnote 14				
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

1.

California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2.

National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3.

Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4.

Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5.

National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6.

National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7.

Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8.

On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9.

On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³ . The existing national 24- hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³ , as was the annual secondary standard of 15 µg/m³ . The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10.

To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11.

On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

12.

The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13.

The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14.

In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: (California Air Resources Board, 5/4/2016)

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. California Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as “non-attainment areas” for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the PM_{2.5} standard and many areas are in non-attainment for PM₁₀ as well. The state therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed for California Air basins to attain ambient air quality standards.

The San Diego County Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within San Diego County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NOX). Currently, San Diego is in “non-attainment” status for federal O₃ and the State PM₁₀, PM_{2.5}, and Ozone; however, an attainment plan is only available for O₃. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered NOX and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NOX reduction measures. NOX and VOCs are Ozone precursors and react organically to form Ozone. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status with respect to both federal and state nonattainment status by pollutants for San Diego County is shown in Table 2.2 on the following page.

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the project produces unmitigable air quality emissions or if the project produces cumulative impacts.

Table 2.2: San Diego County Air Basin Attainment Status by Pollutant

San Diego County Air Basin Attainment Status by Pollutant			
Pollutant	Average Time	California Standards	Federal Standards
Ozone (O ₃)	1 Hour	Non-attainment	No Federal Standard
	8 Hour	Non-attainment	Non-attainment
Respirable Particulate Matter (PM ₁₀)	24 Hour	Non-attainment	Unclassified ¹
	Annual Arithmetic Mean	Non-attainment	Unclassified ²
Fine Particulate Matter PM _{2.5}	24 Hour	No State Standard	Attainment
	Annual Arithmetic Mean	Non-attainment	Attainment
Carbon Monoxide (CO)	8 hour	Attainment	Maintenance Area ³
	1 hour		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	No State Standard	Attainment
	1 Hour	Attainment	No Federal Standard
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	No State Standard	Attainment
	24 Hour	Attainment	Attainment
	1 Hour	Attainment	No Federal Standard
Lead	30 Day Average	Attainment	No Federal Standard
	Calendar Quarter	No State Standard	Attainment
Visibility Reducing Particles	8 Hour (10AM to 6PM, PST)	Unclassified	No Federal Standard
Sulfates	24 Hour	Attainment	No Federal Standard
Hydrogen Sulfide	1 Hour	Unclassified	No Federal Standard
1. Data reflects status as of December 2017 2. Unclassified; indicates data are not sufficient for determining attainment or nonattainment. 3. Maintenance Area (defined by U.S. Department of Transportation) is any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under section 175A of the CAA, as amended.			

2.3.4 California Environmental Quality Act (CEQA) Significance Thresholds

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA guidelines and are as follows:

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

- A:* Conflict with or obstruct implementation of the San Diego Regional Air Quality Strategy (RAQS) or applicable portions of the State Implementation Plan (SIP)?
- B:* Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?

- C:* Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (PM10, PM2.5 or exceed quantitative thresholds for O3 precursors, NOX and VOCs)?
- D:* Expose sensitive receptors (including, but not limited to, schools, hospitals, residences, resident care facilities, or day-care centers) to substantial pollutant concentrations?
- E:* Create objectionable odors affecting a substantial number of people?

2.3.5 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established thresholds in Rule 20.2 for new or modified stationary sources. The County's Guidelines for Determining Significance and Report Format and Content Requirements incorporate screening level thresholds from Rule 20.2 for use in all County related Air Quality Impact Assessments (AQIA) and for determining CEQA air quality impacts (County of San Diego, 2007). These screening criteria can be used to demonstrate that a project's total emissions would not result in a significant impact as defined by CEQA. Also, since SDAPCD does not have AQIA threshold for VOCs, it is acceptable to use the Coachella Valley VOC threshold from South Coast Air Quality Management District. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the project's total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3 on the following page.

Non Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk to between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the project increase the incremental cancer risk to over 10 in one million or a health hazard index (chronic and acute) greater than one. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology.

The U.S. Environmental Protection Agency (U.S. EPA) uses the term Volatile Organic Compounds (VOC) and the California Air Resources Board's (CARB's) Emission Inventory Branch (EIB) uses the term Reactive Organic Gases (ROG) to essentially define the same thing. There are minor deviations between compounds that define each term however for

purposes of this study we will assume they are essentially the same due to the fact SCAQMD interchanges these words and because Air Quality models directly calculates ROG in place of VOC.

Table 2.3: Screening Level Thresholds for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)
Construction Emissions	
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	100 and 55
Nitrogen Oxide (NO _x)	250
Sulfur Oxide (SO _x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75
Operational Emissions	
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	100 and 55
Nitrogen Oxide (NO _x)	250
Sulfur Oxide (SO _x)	250
Carbon Monoxide (CO)	550
Lead and Lead Compounds	3.2
Volatile Organic Compounds (VOCs)	75
Reactive Organic Gases (ROG) SCAQMD	75

2.4 Local Air Quality

Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 11 monitoring sites, which collect data on criteria pollutants. The proposed development project is closest to the El Cajon Monitoring station which is located approximately 6.35 miles northwest of the Project site. Table 2.4 on the following page identifies the criteria pollutants monitored at the aforementioned station.

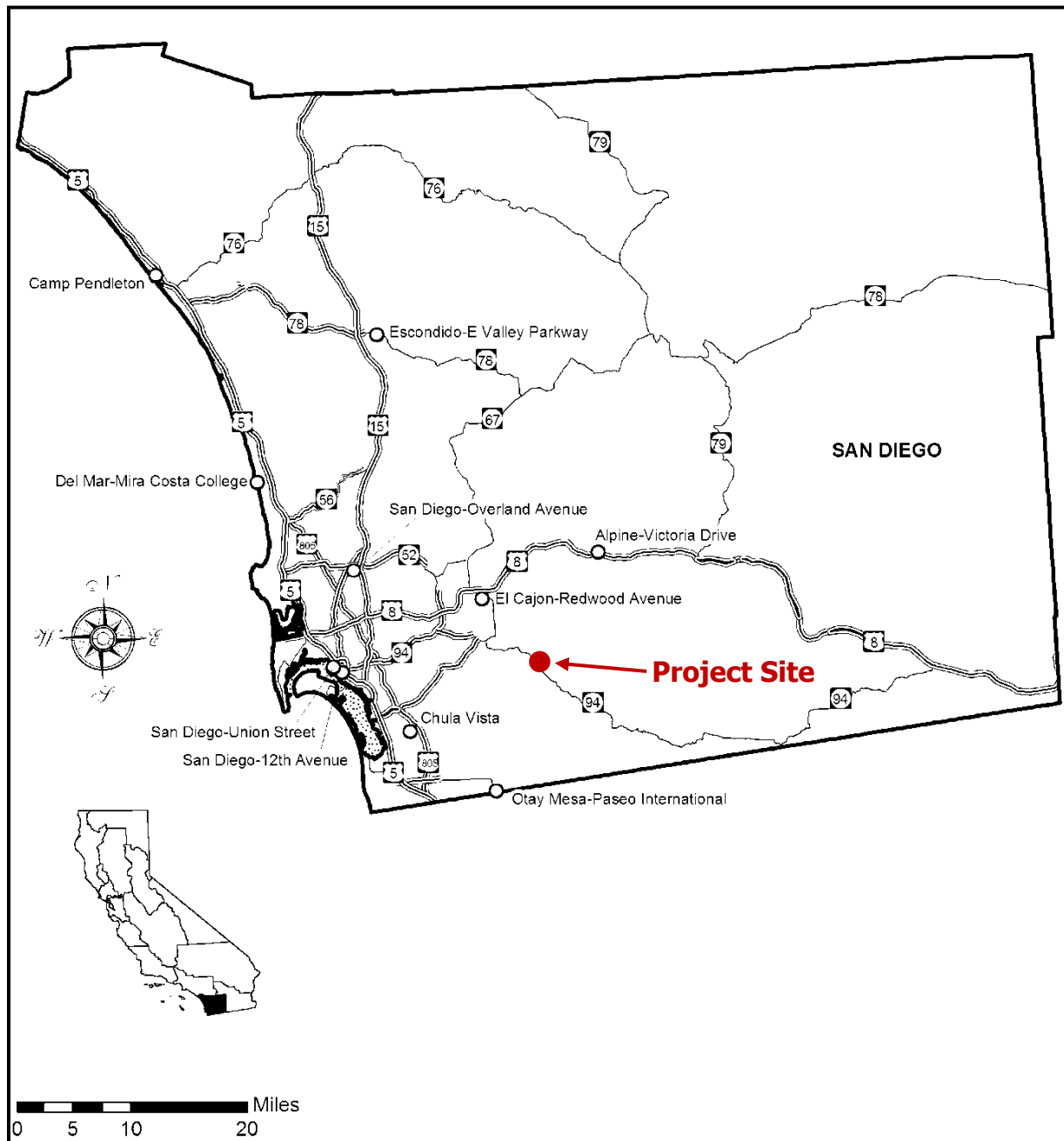
Four additional sites collect meteorological data which is used by SDAPCD to assist with pollutant forecasting, data analysis and characterization of pollutant transport. Figure 2-A on Page 14 below shows the relative locations of the monitoring sites. SDAPCD published the five-year air quality summary for all of the monitoring stations; however, only data within the

last three years is shown as this adequately identifies the background ambient air quality environment (SDAPCD, 2017).

Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2015	2016	2017	2017 Days Exceeded
O ³ (ppm)	El Cajon-Redwood Avenue	1 Hour	0.09 ppm	-	0.08	0.10	0.0	1
		8 Hour	0.070 ppm	0.070 ppm	0.07	0.08	0.08	9
PM ₁₀ (µg/m3)		24 Hour	50 µg/m3	150 µg/m3	48	43	50	-
		Annual Arithmetic Mean	20 µg/m3	-	21.9	22.6	22.5	-
PM _{2.5} (µg/m ³)		24 Hour	-	35 µg/m3	24.7	23.9	31.8	-
		Annual Arithmetic Mean	12 µg/m3	15 µg/m3	8.2	9.3	9.5	-
NO ₂ (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.010	0.009	0.010	-
		1 Hour	0.18 ppm	-	0.059	0.057	0.045	-
CO (ppm)		1 Hour	20 ppm	35 ppm	1.4	1.7	1.5	-
		8 Hour	9 ppm	9 ppm	1.1	1.3	1.4	-

Figure 2-A: Ambient Air Quality Monitoring Stations within SDAB – CARB



3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2016.3.2 air quality model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD). The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project and uses methodologies presented in the U.S. EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in Attachment A to this report.

The SCREEN3 dispersion model will be used to determine the concentration for air pollutants at any location near the pollutant generator. Additionally, the model will predict the maximum exposure distance and concentrations. The SCREEN3 input/output file for the proposed project is shown in Attachment B at the end of this report. The worst case exhaust emissions generated from the Project from construction equipment was utilized and calculated within the CalEEMod model.

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups: 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHHA, February 2015):

Equation 1

$$Dose_{air} = C_{air} * (BR/BW) * A * EF * (1 \times 10^{-6})$$

Dose _{air}	=	Dose through inhalation (mg/kg/d)
C _{air}	=	Concentration in air (µg/m ³) Annual average DPM concentration in µg/m ³ - SCREEN3 predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)
BR/BW	=	Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
A	=	Inhalation absorption factor (assumed to be 1)
EF	=	Exposure frequency (unitless, days/365 days)
1x10 ⁻⁶	=	Micrograms to Milligrams conversion (10 ⁻³ mg/ µg), Liters to Cubic Meters conversion (10 ⁻³ m ³ /l)

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. As described below, the

excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. Specific factors as modeled are shown within the project models attached to this report. The worst case cancer risk calculation is defined in Equation 2 below (OEHHA, February 2015):

Equation 2 $RISK_{inh-res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

$RISK_{inh-res}$	=	Residential inhalation cancer risk
$DOSE_{air}$	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist. RELs are published by the Office of Environmental Health Hazard Assessment (OEHHA, February 2015). Diesel Exhaust has a REL of 5 µg/m³ and targets the respiratory system.

3.2 Construction Assumptions

The Project construction dates were estimated, based on discussions with the project applicant, starting in March 2019 and buildout roughly 18 months later. CalEEMod 2016.3.2 was utilized for all calculations. Also, CalEEMod has been updated to reflect SDAPCD Rule 67 paint VOC limits as well as all diesel equipment during grading and construction being Tier IV rated with DPF. The applicant is fully committed to using Tier IV equipment and since this design feature is assumed within modeling, it shall be assumed that the County will require this design feature as a condition for project approval. Table 3.1 below shows the expected

timeframes for the construction processes for all the project infrastructure, facilities, improvements and commercial structures at the proposed project location, as well as the expected number of pieces of equipment. The project would have an estimated import of 45,000 CY which was analyzed as haulage within CalEEMod. It should be noted that the closest residential sensitive receptor is roughly 145 meters to the west of the project site boundary. Additionally, there are sensitive receptors located roughly 165 meters to the north and 150 meters to the east.

Table 3.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Site Preparation	03/01/2019	04/01/2019	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	04/02/2019	06/10/2019	
Excavators			2
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Paving	06/11/2019	07/15/2019	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction without Crane	07/16/2019	09/07/2020	
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Building Construction with Crane	08/29/2019	09/07/2020	
Cranes			1
Architectural Coating	09/01/2019	09/13/2019	
Air Compressor			1
This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions from Projects of similar size and scope in the County of San Diego.			

3.3 Operational Emissions

Once construction is completed the proposed project would generate emissions from daily operations which would include sources such as Area, Energy, Mobile, Waste and Water uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. Energy sources would be from uses such as onsite natural gas use. Additionally, it was assumed that an average of

10% of the structural surface area will be re-painted each year. Finally, mobile or transportation related emissions are calculated in CalEEMod through the use of EMFAC2014. The Operational model are also shown in Attachment A at the end of this report.

The "Tractor Supply Company (TSC) is a Hobby Farm store that caters to the rural-resident, typically residing in small towns outside of a major metropolitan city. With a customer count of 30-40 per day, patrons are drawn to TSC for its variety in clothing, boots, pet food, and small hardware implements. The Project traffic engineer estimated that the project would generate 887 daily trips (LOS Engineering, 2018). These daily trips were utilized within the CalEEMod analysis using a rural setting. The CalEEMod model also estimates emission predictions for ROG, NO_x, CO, SO₂, PM₁₀ and PM_{2.5} for area source assumptions and are reported in this analysis.

3.4 Micro Scale Operational Emissions

Air pollutant emissions related to project traffic have the potential to create new, or worsen existing localized air quality violations with respect to CO. These increased carbon monoxide "Hot Spots" are determined through the utilization of the ITS Transportation Project-Level Carbon Monoxide Protocol (University of California, Davis, 1997).

In the event the proposed project traffic adds vehicular trips to either an intersection that operates at Level of Service (LOS) E or F or any intersection where the project trips re-classify the intersection level of service from a lower LOS to LOS E or F and when peak-hour trips exceed 3,000 the Project must quantify CO levels (County of San Diego, 2007). It should be noted that LOS is a rating identified in the project traffic study (LOS Engineering, 2018). Based on the project traffic study the proposed project will not add vehicular trips to intersections already operating at LOS E or F or cumulatively cause existing intersections within the project study area to operate at LOS E or F and would therefore not require micro-scale CO emission analysis in this report.

3.5 Odor Impacts (Onsite)

Potential onsite odor generators would include short term construction odors from activities such as paving and possibly painting. Odors created during short term construction activities would most likely be from placing asphalt which has a slight odor from the bitumen and solvents used within hot asphalt. Asphalt operations are fairly quick and are not expected to cause significant long-term odor impacts. Therefore, no significant odor impacts would be expected. Long term impacts would not be expected since operations of the retail operation or storage operation would not generate significant odors. Given this, further discussion of onsite odor impacts would not be necessary in this report.

4.0 FINDINGS

4.1 Construction Findings

Construction emissions in pounds per day from the construction operations and equipment identified in Section 3.2 above is shown in Table 4.1 below. Based on these numbers, the project would not exceed County standards at sensitive receptor locations or anywhere around the project site and would not require mitigation to comply. It should be noted that as a design feature, the project construction team will utilize Tier IV construction diesel equipment for this project.

Table 4.1: Expected Construction Emissions Summary – Pounds per Day (Tier IV)

Year	ROG	NO _x	CO	SO ₂	PM ₁₀ (Dust)	PM ₁₀ (Exhaust)	PM ₁₀ (Total)	PM _{2.5} (Dust)	PM _{2.5} (Exhaust)	PM _{2.5} (Total)
2019	4.091	37.173	41.203	0.154	19.260	0.145	19.271	10.096	0.139	10.107
2020	3.623	4.585	20.136	0.038	0.908	0.021	0.929	0.244	0.020	0.264
Significance Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
SDAPCD Impact?	No	No	No	No	-	-	No	-	-	No

4.2 Health Risk

The proposed project will utilize Tier IV construction equipment with DPF as a design feature as discussed in Section 3.2 above. Based upon the air quality modeling, worst-case PM₁₀ from exhaust would cumulatively produce 0.00137 tons over the construction duration (397-working days) or an average of 1.09×10^{-4} grams/second. The average emission rate over the grading area is 2.17×10^{-9} g/m²/s, which was calculated as follows:

$$\frac{1.09 * 10^{-4} \frac{\text{grams}}{\text{second}}}{12.37 \text{ acres} * 4,046 \frac{\text{meters}^2}{\text{acre}}} = 2.17 * 10^{-9} \frac{\text{grams}}{\text{meters}^2 \text{ second}}$$

Utilizing the SCREEN3 dispersion model, we find that the peak maximum 1-hr concentration is 0.088 µg/m³ during the worst-case construction period. Converting the peak 1-hr concentration to an annual concentration reduces the concentration to 0.007 µg/m³. Therefore, utilizing the risk equation identified above in Section 3.1, the inhalation cancer risk for the point of maximum exposure (187 meters from the project centroid) is 1.48 per one

million exposed which does not exceed 10 per one million exposed. Since the point of maximum exposure 187 meters from the project site has a risk lower than 10 per million all points either closer or farther from the site would be lower than 1.48 per million exposed. Given this, all sensitive receptors would not be subject to significant impacts. Based on this, no health risks related to diesel equipment during construction would be expected. The calculations are shown in **Attachment C** to this report. It should be stated again that the Tier IV with DPF project design feature has been assumed within all modeling and will be included as a condition to project approval.

There are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks. These risks are calculated based on methods identified in Section 3.1 of this report. From this we find that the annual concentration of 0.0076 $\mu\text{g}/\text{m}^3$ divided by the chronic REL of 5 $\mu\text{g}/\text{m}^3$ yields a Health Hazard Index of 0.0015, which is less than one. Therefore, no non-cancer risks are expected and all health risks are considered less than significant.

4.3 Operational Findings

Project Buildout is expected 2020 with full operations in 2021. The project traffic generation of 887 trips during a typical day as was projected by the traffic engineer (LOS Engineering, 2018) and was used within this analysis along with average rural trip distances and mix ratios as estimated by CalEEMod 2016.3.2. Additionally, the CalEEMod model was run for the winter and summer scenarios to determine operational impacts for the first year of operation.

The expected daily pollutant generation can be calculated utilizing the product of the average daily vehicle miles traveled and the expected emissions inventory calculated by EMFAC2014; CalEEMod 2016.3.2 performs this calculation. Additionally, the area and energy sources are estimated within the model based on the land uses within the model and San Diego Gas and Electric unit emission generation for estimated energy consumptions projected by CalEEMod. The daily pollutants calculated for summer and winter are shown in Tables 4.2 and 4.3 on the following page.

Based upon these calculations, the proposed project would not exceed SDAPCD operational air quality significance thresholds and would not be required to implement mitigation measures to comply with CEQA and SDAPCD thresholds.

Table 4.2: Expected Summer Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	2.027	0.000	0.020	0.000	0.000	0.000
Energy	0.004	0.040	0.034	0.000	0.003	0.003
Mobile	1.328	5.020	12.966	0.042	3.412	0.935
Total (Unmitigated)	3.359	5.060	13.020	0.042	3.415	0.938
SDAPCD Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

Table 4.3: Expected Winter Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area	2.027	0.000	0.020	0.000	0.000	0.000
Energy	0.004	0.040	0.034	0.000	0.003	0.003
Mobile	1.287	5.122	13.107	0.039	3.412	0.935
Total (Unmitigated)	3.318	5.162	13.161	0.040	3.416	0.939
SDAPCD Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CalEEMod The final numbers are all rounded within Excel and are reported as rounded numbers.						

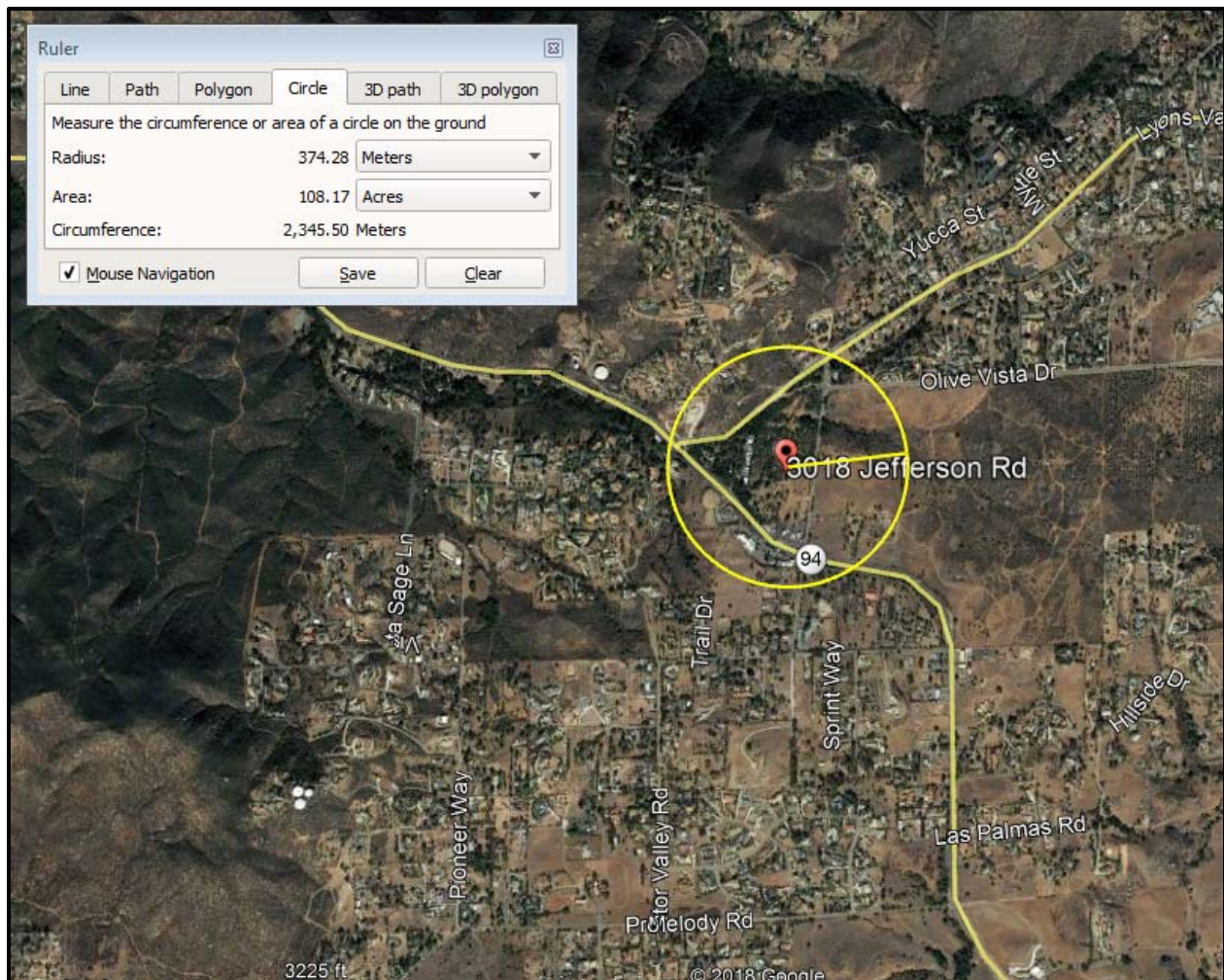
4.4 Cumulative Impact Findings

The proposed project would not generate significant construction or operational impacts as demonstrated within this analysis. Furthermore, the project would not add any trips to any intersection with LOS E or F designations or cause any intersections to be reclassified to LOS E or F with over 3,000 peak hour trips. Given this, significant cumulative impacts are not expected.

It should also be noted that the point of maximum exposure for construction emissions generated offsite would be 187 meters away and does encompass sensitive receptors. It was found though that impacts would be less than significant. There are sensitive receptors located roughly 145 meters to the west, 165 meters to the north and 150 meters to the east. Because impacts at the point of maximum exposure were determined to be less than significant, impacts at these locations would be less than significant.

If a nearby project of similar size and scope was to be constructed adjacent to the project site, emissions would likely double though based upon emission as shown in Table 4.1 above, this scenario would still not generate significant impacts. Figure 4-A below shows a radius around the project site showing a distance twice the point of maximum exposure identified in the dispersion modeling results in Section 4.2 above. Based on review of the site, no projects of similar or larger scope are proposed in the near term. Given this, no significant cumulative construction or health risk impacts are expected.

Figure 4-A: Project site showing twice the point of maximum exposure



Finally, the project use as proposed is consistent with what the current zoning (C36) allows and the project would not be required to rezone for the proposed use. Based on the C-36 designation, allowable FAR, and the total site size (19.41 acres), the maximum allowable facility size of similar use could be 215,000 SF of specialty retail. This maximum buildout site

would generate at least 8,600 ADT (per a specialty retail trip generation rate of 40 trips per 1,000 SF (KSF) or $40 \text{ trips/KSF} \times 215 \text{ KSF} = 8,600 \text{ ADT}$). The proposed project would generate 887 ADT (sum of pass-by, diverted, and primary trips) which is lower than the maximum buildout project potential. Based on this, the project would be consistent with the zoning and general plan designation and is therefore consistent with the RAQS and SIP, and would have less than significant impacts related to conformance with regional standards.

4.5 Conclusion of Findings

Based upon the analysis of construction and operational activities for the proposed project, direct operational or direct construction impacts would not be expected.

As a design feature, the proposed project would utilize Tier IV Diesel Equipment with DPF. Diesel Particulates from exhaust during construction was not found to increase cancer risks greater than 10 per million exposed and would therefore not generate significant health risk impacts.

The proposed project would not be expected to generate cumulative construction impacts.

The proposed project has been developed to be consistent with the general plan and would therefore be consistent with the RAQS and SIP. The project's impacts related to conformity to regional air quality standards and plans would be less than significant.

Implementation of the following design features was assumed within all project modeling and would be included as a condition of approval for the project. The model assumes the following:

- The project would install 100% LED lighting for both interior and exterior lighting and will install smart meters.
- The project would install Low Flow water fixtures in all the units.
- The Project would provide separate waste containers to allow for simpler material separations or the Project would pay for a waste collection service that recycles the materials in accordance with AB 341 to achieve a 75% waste diversion. All green waste will be diverted from landfills and recycled as mulch.
- The project would install 3 EV Charging Stations.
- All construction diesel equipment would be Tier IV compliant and shall include Diesel Particulate Filters (DPF).

5.0 References

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6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed Jamul Commercial development. This report was prepared utilizing the latest emission rates and reduction methodologies. This report was prepared by Jeremy Loudon; a County approved CEQA Consultant for Air Quality.



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Date February 25, 2019

ATTACHMENT A

CalEEMod

Jamul Commercial - San Diego County, Summer

Jamul Commercial
San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	65.00	1000sqft	4.28	65,000.00	0
Parking Lot	83.00	Space	4.00	33,200.00	0
Parking Lot	6.30	1000sqft	1.00	6,300.00	0
Parking Lot	9.00	Space	0.09	3,600.00	0
Hardware/Paint Store	18.80	1000sqft	1.00	18,800.00	0
User Defined Retail	15.00	User Defined Unit	2.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW/hr)	525.68	CH4 Intensity (lb/MW/hr)	0.021	N2O Intensity (lb/MW/hr)	0.004

1.3 User Entered Comments & Non-Default Data

Jamul Commercial - San Diego County, Summer

Project Characteristics - RPS

Land Use - 12.37 acres

Construction Phase - cs

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading - Import 45,000 CY

Architectural Coating - rule 67 paint

Vehicle Trips - per traffic study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Rule 67 Paints

Energy Use - Outdoor Retail Areas connected to Tractor Supply will require lighting similar to Parking Areas.

Construction Off-road Equipment Mitigation - Tier 4 and Level 3 DPF

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

Jamul Commercial - San Diego County, Summer

tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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
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	268.00
tblConstructionPhase	NumDays	300.00	10.00
tblConstructionPhase	NumDays	30.00	50.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	10.00	22.00
tblEnergyUse	LightingElect	0.00	0.35
tblGrading	AcresOfGrading	125.00	20.00
tblGrading	AcresOfGrading	0.00	20.00
tblGrading	MaterialImported	0.00	45,000.00
tblLandUse	LotAcreage	1.49	4.28
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	0.75	4.00
tblLandUse	LotAcreage	0.08	0.09

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tblLandUse	LotAcreage	0.43	1.00
tblLandUse	LotAcreage	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	525.68
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	0.00	67.40
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	13.60
tblVehicleTrips	DV_TP	0.00	29.00
tblVehicleTrips	PB_TP	0.00	26.00
tblVehicleTrips	PR_TP	0.00	45.00
tblVehicleTrips	ST_TR	82.52	40.00
tblVehicleTrips	ST_TR	1.68	1.84
tblVehicleTrips	ST_TR	0.00	1.00
tblVehicleTrips	SU_TR	68.65	40.00
tblVehicleTrips	SU_TR	1.68	1.84
tblVehicleTrips	SU_TR	0.00	1.00
tblVehicleTrips	WD_TR	51.29	40.00
tblVehicleTrips	WD_TR	1.68	1.84
tblVehicleTrips	WD_TR	0.00	1.00

2.0 Emissions Summary

Jamul Commercial - San Diego County, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.3610	88.3935	41.5811	0.1540	19.2603	2.5119	21.6522	10.0958	2.3157	12.2963	0.0000	16,144.67 65	16,144.67 65	2.8126	0.0000	16,214.99 19
2020	5.2927	18.6421	19.9467	0.0381	0.9077	1.0493	1.9570	0.2436	0.9973	1.2409	0.0000	3,708.027 6	3,708.027 6	0.5529	0.0000	3,721.849 8
Maximum	6.3610	88.3935	41.5811	0.1540	19.2603	2.5119	21.6522	10.0958	2.3157	12.2963	0.0000	16,144.67 65	16,144.67 65	2.8126	0.0000	16,214.99 19

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0909	37.1733	41.2034	0.1540	19.2603	0.1445	19.2712	10.0958	0.1389	10.1065	0.0000	16,144.67 65	16,144.67 65	2.8126	0.0000	16,214.99 19
2020	3.6229	4.5845	20.1360	0.0381	0.9077	0.0213	0.9290	0.2436	0.0204	0.2641	0.0000	3,708.027 6	3,708.027 6	0.5529	0.0000	3,721.849 8
Maximum	4.0909	37.1733	41.2034	0.1540	19.2603	0.1445	19.2712	10.0958	0.1389	10.1065	0.0000	16,144.67 65	16,144.67 65	2.8126	0.0000	16,214.99 19

	ROG	NOx	CO	SO2	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	33.81	60.99	0.31	0.00	0.00	95.34	14.44	0.00	95.19	23.39	0.00	0.00	0.00	0.00	0.00	0.00

Jamul Commercial - San Diego County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Energy	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
Mobile	1.3279	5.0198	12.9657	0.0415	3.3775	0.0346	3.4121	0.9027	0.0324	0.9351		4,217.2941	4,217.2941	0.2311		4,223.0719
Total	3.3589	5.0604	13.0199	0.0417	3.3775	0.0378	3.4152	0.9027	0.0355	0.9382		4,265.8381	4,265.8381	0.2322	8.9000e-004	4,271.9070

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Energy	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
Mobile	1.3279	5.0198	12.9657	0.0415	3.3775	0.0346	3.4121	0.9027	0.0324	0.9351		4,217.2941	4,217.2941	0.2311		4,223.0719
Total	3.3589	5.0604	13.0199	0.0417	3.3775	0.0378	3.4152	0.9027	0.0355	0.9382		4,265.8381	4,265.8381	0.2322	8.9000e-004	4,271.9070

Jamul Commercial - San Diego County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2019	4/1/2019	5	22	
2	Grading	Grading	4/2/2019	6/10/2019	5	50	
3	Paving	Paving	6/11/2019	7/15/2019	5	25	
4	Building Construction	Building Construction	7/16/2019	9/7/2020	5	300	
5	Architectural Coating	Architectural Coating	8/29/2019	9/7/2020	5	268	
6	Building Construction Crane Usage	Building Construction	9/1/2019	9/13/2019	5	10	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 20

Acres of Paving: 5.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 125,700; Non-Residential Outdoor: 41,900; Striped Parking Area: 2,586 (Architectural Coating – sqft)

OffRoad Equipment

Jamul Commercial - San Diego County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane Usage	Cranes	1	7.00	231	0.29

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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,625.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane Usage	1	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Jamul Commercial - San Diego County, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.0304	0.0000	19.0304	10.0348	0.0000	10.0348			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	19.0304	2.3904	21.4207	10.0348	2.1991	12.2339		3,766.4529	3,766.4529	1.1917		3,796.2445

Jamul Commercial - San Diego County, Summer

3.2 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0732	0.8189	2.4200e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		241.2801	241.2801	7.5000e-003		241.4677
Total	0.0978	0.0732	0.8189	2.4200e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		241.2801	241.2801	7.5000e-003		241.4677

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					19.0304	0.0000	19.0304	10.0348	0.0000	10.0348			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	0.4656	2.0175	20.8690	0.0380	19.0304	9.3100e-003	19.0397	10.0348	9.3100e-003	10.0441	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Jamul Commercial - San Diego County, Summer

3.2 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0978	0.0732	0.8189	2.4200e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		241.2801	241.2801	7.5000e-003		241.4677
Total	0.0978	0.0732	0.8189	2.4200e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		241.2801	241.2801	7.5000e-003		241.4677

3.3 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5728	0.0000	6.5728	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	6.5728	2.3827	8.9554	3.3752	2.1920	5.5672		6,140.0195	6,140.0195	1.9426		6,188.5854

Jamul Commercial - San Diego County, Summer

3.3 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9765	33.7919	7.2944	0.0893	1.9658	0.1275	2.0934	0.5388	0.1220	0.6608		9,736.5680	9,736.5680	0.8616		9,758.1091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1087	0.0814	0.9099	2.6900e-003	0.2555	1.7500e-003	0.2572	0.0678	1.6100e-003	0.0694		268.0890	268.0890	8.3400e-003		268.2974
Total	1.0852	33.8733	8.2043	0.0920	2.2213	0.1293	2.3506	0.6065	0.1236	0.7301		10,004.6570	10,004.6570	0.8700		10,026.4065

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					6.5728	0.0000	6.5728	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.0152	0.0152		0.0152	0.0152	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	0.7616	3.3000	32.9991	0.0620	6.5728	0.0152	6.5880	3.3752	0.0152	3.3904	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Jamul Commercial - San Diego County, Summer

3.3 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9765	33.7919	7.2944	0.0893	1.9658	0.1275	2.0934	0.5388	0.1220	0.6608		9,736.5680	9,736.5680	0.8616		9,758.1091
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1087	0.0814	0.9099	2.6900e-003	0.2555	1.7500e-003	0.2572	0.0678	1.6100e-003	0.0694		268.0890	268.0890	8.3400e-003		268.2974
Total	1.0852	33.8733	8.2043	0.0920	2.2213	0.1293	2.3506	0.6065	0.1236	0.7301		10,004.6570	10,004.6570	0.8700		10,026.4065

3.4 Paving - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.5334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9879	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548

Jamul Commercial - San Diego County, Summer

3.4 Paving - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0815	0.0610	0.6824	2.0200e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		201.0668	201.0668	6.2500e-003		201.2231
Total	0.0815	0.0610	0.6824	2.0200e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		201.0668	201.0668	6.2500e-003		201.2231

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		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.5334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8139	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548

Jamul Commercial - San Diego County, Summer

3.4 Paving - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0815	0.0610	0.6824	2.0200e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		201.0668	201.0668	6.2500e-003		201.2231
Total	0.0815	0.0610	0.6824	2.0200e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		201.0668	201.0668	6.2500e-003		201.2231

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9201	15.8227	15.1574	0.0219		1.0671	1.0671		1.0077	1.0077		2,091.7709	2,091.7709	0.4732		2,103.6009
Total	1.9201	15.8227	15.1574	0.0219		1.0671	1.0671		1.0077	1.0077		2,091.7709	2,091.7709	0.4732		2,103.6009

Jamul Commercial - San Diego County, Summer

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0906	2.4832	0.6389	5.3600e-003	0.1286	0.0165	0.1451	0.0370	0.0158	0.0528		574.3119	574.3119	0.0457		575.4551
Worker	0.2772	0.2075	2.3202	6.8600e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		683.6270	683.6270	0.0213		684.1584
Total	0.3678	2.6907	2.9591	0.0122	0.7800	0.0210	0.8010	0.2098	0.0199	0.2297		1,257.9389	1,257.9389	0.0670		1,259.6135

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	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,091.7709	2,091.7709	0.4732		2,103.6009
Total	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,091.7709	2,091.7709	0.4732		2,103.6009

Jamul Commercial - San Diego County, Summer

3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0906	2.4832	0.6389	5.3600e-003	0.1286	0.0165	0.1451	0.0370	0.0158	0.0528		574.3119	574.3119	0.0457		575.4551
Worker	0.2772	0.2075	2.3202	6.8600e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		683.6270	683.6270	0.0213		684.1584
Total	0.3678	2.6907	2.9591	0.0122	0.7800	0.0210	0.8010	0.2098	0.0199	0.2297		1,257.9389	1,257.9389	0.0670		1,259.6135

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402
Total	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402

Jamul Commercial - San Diego County, Summer

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0738	2.2657	0.5738	5.3100e-003	0.1286	0.0106	0.1391	0.0370	0.0101	0.0471		570.6061	570.6061	0.0433		571.6895
Worker	0.2594	0.1874	2.1269	6.6400e-003	0.6514	4.4000e-003	0.6558	0.1728	4.0500e-003	0.1768		662.0397	662.0397	0.0193		662.5212
Total	0.3332	2.4531	2.7007	0.0120	0.7800	0.0150	0.7950	0.2098	0.0141	0.2239		1,232.6457	1,232.6457	0.0626		1,234.2106

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	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402
Total	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402

Jamul Commercial - San Diego County, Summer

3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0738	2.2657	0.5738	5.3100e-003	0.1286	0.0106	0.1391	0.0370	0.0101	0.0471		570.6061	570.6061	0.0433		571.6895
Worker	0.2594	0.1874	2.1269	6.6400e-003	0.6514	4.4000e-003	0.6558	0.1728	4.0500e-003	0.1768		662.0397	662.0397	0.0193		662.5212
Total	0.3332	2.4531	2.7007	0.0120	0.7800	0.0150	0.7950	0.2098	0.0141	0.2239		1,232.6457	1,232.6457	0.0626		1,234.2106

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	3.2098	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Jamul Commercial - San Diego County, Summer

3.6 Architectural Coating - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0407	0.4549	1.3500e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		134.0445	134.0445	4.1700e-003		134.1487
Total	0.0544	0.0407	0.4549	1.3500e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		134.0445	134.0445	4.1700e-003		134.1487

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	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		282.0423
Total	2.9730	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		282.0423

Jamul Commercial - San Diego County, Summer

3.6 Architectural Coating - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0407	0.4549	1.3500e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		134.0445	134.0445	4.1700e-003		134.1487
Total	0.0544	0.0407	0.4549	1.3500e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		134.0445	134.0445	4.1700e-003		134.1487

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	3.1855	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Jamul Commercial - San Diego County, Summer

3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0509	0.0367	0.4170	1.3000e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		129.8117	129.8117	3.7800e-003		129.9061
Total	0.0509	0.0367	0.4170	1.3000e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		129.8117	129.8117	3.7800e-003		129.9061

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	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0218		281.9928
Total	2.9730	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0218		281.9928

Jamul Commercial - San Diego County, Summer

3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0509	0.0367	0.4170	1.3000e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		129.8117	129.8117	3.7800e-003		129.9061
Total	0.0509	0.0367	0.4170	1.3000e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		129.8117	129.8117	3.7800e-003		129.9061

3.7 Building Construction Crane Usage - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4410	5.2561	2.0064	5.0500e-003		0.2228	0.2228		0.2050	0.2050		499.8093	499.8093	0.1581		503.7626
Total	0.4410	5.2561	2.0064	5.0500e-003		0.2228	0.2228		0.2050	0.2050		499.8093	499.8093	0.1581		503.7626

Jamul Commercial - San Diego County, Summer

3.7 Building Construction Crane Usage - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0906	2.4832	0.6389	5.3600e-003	0.1286	0.0165	0.1451	0.0370	0.0158	0.0528		574.3119	574.3119	0.0457		575.4551
Worker	0.2772	0.2075	2.3202	6.8600e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		683.6270	683.6270	0.0213		684.1584
Total	0.3678	2.6907	2.9591	0.0122	0.7800	0.0210	0.8010	0.2098	0.0199	0.2297		1,257.9389	1,257.9389	0.0670		1,259.6135

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	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	499.8093	499.8093	0.1581		503.7626
Total	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	499.8093	499.8093	0.1581		503.7626

Jamul Commercial - San Diego County, Summer

3.7 Building Construction Crane Usage - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0906	2.4832	0.6389	5.3600e-003	0.1286	0.0165	0.1451	0.0370	0.0158	0.0528		574.3119	574.3119	0.0457		575.4551
Worker	0.2772	0.2075	2.3202	6.8600e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		683.6270	683.6270	0.0213		684.1584
Total	0.3678	2.6907	2.9591	0.0122	0.7800	0.0210	0.8010	0.2098	0.0199	0.2297		1,257.9389	1,257.9389	0.0670		1,259.6135

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

Jamul Commercial - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.3279	5.0198	12.9657	0.0415	3.3775	0.0346	3.4121	0.9027	0.0324	0.9351		4,217.294 1	4,217.294 1	0.2311		4,223.071 9
Unmitigated	1.3279	5.0198	12.9657	0.0415	3.3775	0.0346	3.4121	0.9027	0.0324	0.9351		4,217.294 1	4,217.294 1	0.2311		4,223.071 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hardware/Paint Store	752.00	752.00	752.00	1,108,622	1,108,622
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	119.60	119.60	119.60	462,071	462,071
User Defined Retail	15.00	15.00	15.00	22,113	22,113
Total	886.60	886.60	886.60	1,592,806	1,592,806

4.3 Trip Type Information

Jamul Commercial - San Diego County, Summer

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
Hardware/Paint Store	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Retail	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hardware/Paint Store	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Unrefrigerated Warehouse-No Rail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
User Defined Retail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Jamul Commercial - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
NaturalGas Unmitigated	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

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					
Hardware/Paint Store	114.86	1.2400e-003	0.0113	9.4600e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004		13.5130	13.5130	2.6000e-004	2.5000e-004	13.5933
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	297.397	3.2100e-003	0.0292	0.0245	1.7000e-004		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003		34.9879	34.9879	6.7000e-004	6.4000e-004	35.1958
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4500e-003	0.0404	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

Jamul Commercial - San Diego County, Summer

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hardware/Paint Store	0.11486	1.2400e-003	0.0113	9.4600e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004		13.5130	13.5130	2.6000e-004	2.5000e-004	13.5933
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	0.297397	3.2100e-003	0.0292	0.0245	1.7000e-004		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003		34.9879	34.9879	6.7000e-004	6.4000e-004	35.1958
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4500e-003	0.0404	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

6.0 Area Detail**6.1 Mitigation Measures Area**

Jamul Commercial - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Unmitigated	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

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	0.2161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8900e-003	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Total	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

Jamul Commercial - San Diego County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8900e-003	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Total	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Jamul Commercial - San Diego County, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Jamul Commercial - San Diego County, Winter

Jamul Commercial
San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	65.00	1000sqft	4.28	65,000.00	0
Parking Lot	83.00	Space	4.00	33,200.00	0
Parking Lot	6.30	1000sqft	1.00	6,300.00	0
Parking Lot	9.00	Space	0.09	3,600.00	0
Hardware/Paint Store	18.80	1000sqft	1.00	18,800.00	0
User Defined Retail	15.00	User Defined Unit	2.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW/hr)	525.68	CH4 Intensity (lb/MW/hr)	0.021	N2O Intensity (lb/MW/hr)	0.004

1.3 User Entered Comments & Non-Default Data

Jamul Commercial - San Diego County, Winter

Project Characteristics - RPS

Land Use - 12.37 acres

Construction Phase - cs

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading - Import 45,000 CY

Architectural Coating - rule 67 paint

Vehicle Trips - per traffic study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Rule 67 Paints

Energy Use - Outdoor Retail Areas connected to Tractor Supply will require lighting similar to Parking Areas.

Construction Off-road Equipment Mitigation - Tier 4 and Level 3 DPF

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

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tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00

Jamul Commercial - San Diego County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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
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	268.00
tblConstructionPhase	NumDays	300.00	10.00
tblConstructionPhase	NumDays	30.00	50.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	10.00	22.00
tblEnergyUse	LightingElect	0.00	0.35
tblGrading	AcresOfGrading	125.00	20.00
tblGrading	AcresOfGrading	0.00	20.00
tblGrading	MaterialImported	0.00	45,000.00
tblLandUse	LotAcreage	1.49	4.28
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	0.75	4.00
tblLandUse	LotAcreage	0.08	0.09

Jamul Commercial - San Diego County, Winter

tblLandUse	LotAcreage	0.43	1.00
tblLandUse	LotAcreage	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	525.68
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	0.00	67.40
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	13.60
tblVehicleTrips	DV_TP	0.00	29.00
tblVehicleTrips	PB_TP	0.00	26.00
tblVehicleTrips	PR_TP	0.00	45.00
tblVehicleTrips	ST_TR	82.52	40.00
tblVehicleTrips	ST_TR	1.68	1.84
tblVehicleTrips	ST_TR	0.00	1.00
tblVehicleTrips	SU_TR	68.65	40.00
tblVehicleTrips	SU_TR	1.68	1.84
tblVehicleTrips	SU_TR	0.00	1.00
tblVehicleTrips	WD_TR	51.29	40.00
tblVehicleTrips	WD_TR	1.68	1.84
tblVehicleTrips	WD_TR	0.00	1.00

2.0 Emissions Summary

Jamul Commercial - San Diego County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	6.4650	88.7498	42.0361	0.1523	19.2603	2.5149	21.6522	10.0958	2.3185	12.2963	0.0000	15,964.3094	15,964.3094	2.8433	0.0000	16,035.3921
2020	5.3459	18.6640	19.8186	0.0375	0.9077	1.0495	1.9573	0.2436	0.9975	1.2411	0.0000	3,643.2976	3,643.2976	0.5543	0.0000	3,657.1553
Maximum	6.4650	88.7498	42.0361	0.1523	19.2603	2.5149	21.6522	10.0958	2.3185	12.2963	0.0000	15,964.3094	15,964.3094	2.8433	0.0000	16,035.3921

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.1949	37.5296	41.6585	0.1523	19.2603	0.1475	19.2712	10.0958	0.1417	10.1065	0.0000	15,964.3094	15,964.3094	2.8433	0.0000	16,035.3921
2020	3.6761	4.6064	20.0079	0.0375	0.9077	0.0215	0.9292	0.2436	0.0206	0.2643	0.0000	3,643.2976	3,643.2976	0.5543	0.0000	3,657.1553
Maximum	4.1949	37.5296	41.6585	0.1523	19.2603	0.1475	19.2712	10.0958	0.1417	10.1065	0.0000	15,964.3094	15,964.3094	2.8433	0.0000	16,035.3921

	ROG	NOx	CO	SO2	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	33.36	60.77	0.30	0.00	0.00	95.26	14.44	0.00	95.11	23.39	0.00	0.00	0.00	0.00	0.00	0.00

Jamul Commercial - San Diego County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Energy	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
Mobile	1.2873	5.1218	13.1067	0.0393	3.3775	0.0350	3.4124	0.9027	0.0327	0.9354		3,995.2383	3,995.2383	0.2351		4,001.1156
Total	3.3184	5.1624	13.1609	0.0396	3.3775	0.0381	3.4156	0.9027	0.0358	0.9385		4,043.7824	4,043.7824	0.2361	8.9000e-004	4,049.9507

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Energy	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
Mobile	1.2873	5.1218	13.1067	0.0393	3.3775	0.0350	3.4124	0.9027	0.0327	0.9354		3,995.2383	3,995.2383	0.2351		4,001.1156
Total	3.3184	5.1624	13.1609	0.0396	3.3775	0.0381	3.4156	0.9027	0.0358	0.9385		4,043.7824	4,043.7824	0.2361	8.9000e-004	4,049.9507

Jamul Commercial - San Diego County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2019	4/1/2019	5	22	
2	Grading	Grading	4/2/2019	6/10/2019	5	50	
3	Paving	Paving	6/11/2019	7/15/2019	5	25	
4	Building Construction	Building Construction	7/16/2019	9/7/2020	5	300	
5	Architectural Coating	Architectural Coating	8/29/2019	9/7/2020	5	268	
6	Building Construction Crane Usage	Building Construction	9/1/2019	9/13/2019	5	10	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 20

Acres of Paving: 5.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 125,700; Non-Residential Outdoor: 41,900; Striped Parking Area: 2,586 (Architectural Coating – sqft)

OffRoad Equipment

Jamul Commercial - San Diego County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane Usage	Cranes	1	7.00	231	0.29

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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,625.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane Usage	1	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

Jamul Commercial - San Diego County, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.0304	0.0000	19.0304	10.0348	0.0000	10.0348			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	19.0304	2.3904	21.4207	10.0348	2.1991	12.2339		3,766.4529	3,766.4529	1.1917		3,796.2445

Jamul Commercial - San Diego County, Winter

3.2 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1132	0.0822	0.7579	2.2700e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		226.4090	226.4090	7.0500e-003		226.5852
Total	0.1132	0.0822	0.7579	2.2700e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		226.4090	226.4090	7.0500e-003		226.5852

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					19.0304	0.0000	19.0304	10.0348	0.0000	10.0348			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0380		9.3100e-003	9.3100e-003		9.3100e-003	9.3100e-003	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	0.4656	2.0175	20.8690	0.0380	19.0304	9.3100e-003	19.0397	10.0348	9.3100e-003	10.0441	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Jamul Commercial - San Diego County, Winter

3.2 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1132	0.0822	0.7579	2.2700e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		226.4090	226.4090	7.0500e-003		226.5852
Total	0.1132	0.0822	0.7579	2.2700e-003	0.2299	1.5800e-003	0.2315	0.0610	1.4500e-003	0.0624		226.4090	226.4090	7.0500e-003		226.5852

3.3 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5728	0.0000	6.5728	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	6.5728	2.3827	8.9554	3.3752	2.1920	5.5672		6,140.0195	6,140.0195	1.9426		6,188.5854

Jamul Commercial - San Diego County, Winter

3.3 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0041	34.1382	7.8172	0.0878	1.9658	0.1305	2.0963	0.5388	0.1249	0.6636		9,572.7245	9,572.7245	0.8928		9,595.0454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1258	0.0913	0.8421	2.5200e-003	0.2555	1.7500e-003	0.2572	0.0678	1.6100e-003	0.0694		251.5655	251.5655	7.8300e-003		251.7613
Total	1.1299	34.2296	8.6593	0.0903	2.2213	0.1323	2.3535	0.6065	0.1265	0.7330		9,824.2900	9,824.2900	0.9007		9,846.8067

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					6.5728	0.0000	6.5728	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0620		0.0152	0.0152		0.0152	0.0152	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	0.7616	3.3000	32.9991	0.0620	6.5728	0.0152	6.5880	3.3752	0.0152	3.3904	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Jamul Commercial - San Diego County, Winter

3.3 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.0041	34.1382	7.8172	0.0878	1.9658	0.1305	2.0963	0.5388	0.1249	0.6636		9,572.7245	9,572.7245	0.8928		9,595.0454
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1258	0.0913	0.8421	2.5200e-003	0.2555	1.7500e-003	0.2572	0.0678	1.6100e-003	0.0694		251.5655	251.5655	7.8300e-003		251.7613
Total	1.1299	34.2296	8.6593	0.0903	2.2213	0.1323	2.3535	0.6065	0.1265	0.7330		9,824.2900	9,824.2900	0.9007		9,846.8067

3.4 Paving - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.5334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9879	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548

Jamul Commercial - San Diego County, Winter

3.4 Paving - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0685	0.6316	1.8900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		188.6741	188.6741	5.8700e-003		188.8210
Total	0.0944	0.0685	0.6316	1.8900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		188.6741	188.6741	5.8700e-003		188.8210

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		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.5334					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8139	1.2154	17.2957	0.0228		5.6100e-003	5.6100e-003		5.6100e-003	5.6100e-003	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548

Jamul Commercial - San Diego County, Winter

3.4 Paving - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0685	0.6316	1.8900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		188.6741	188.6741	5.8700e-003		188.8210
Total	0.0944	0.0685	0.6316	1.8900e-003	0.1916	1.3100e-003	0.1929	0.0508	1.2100e-003	0.0520		188.6741	188.6741	5.8700e-003		188.8210

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9201	15.8227	15.1574	0.0219		1.0671	1.0671		1.0077	1.0077		2,091.7709	2,091.7709	0.4732		2,103.6009
Total	1.9201	15.8227	15.1574	0.0219		1.0671	1.0671		1.0077	1.0077		2,091.7709	2,091.7709	0.4732		2,103.6009

Jamul Commercial - San Diego County, Winter

3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0947	2.4811	0.7124	5.2100e-003	0.1286	0.0168	0.1454	0.0370	0.0161	0.0531		558.5275	558.5275	0.0488		559.7474
Worker	0.3208	0.2329	2.1474	6.4400e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		641.4920	641.4920	0.0200		641.9913
Total	0.4156	2.7140	2.8598	0.0117	0.7800	0.0213	0.8013	0.2098	0.0202	0.2300		1,200.0196	1,200.0196	0.0688		1,201.7387

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	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,091.7709	2,091.7709	0.4732		2,103.6009
Total	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,091.7709	2,091.7709	0.4732		2,103.6009

Jamul Commercial - San Diego County, Winter

3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0947	2.4811	0.7124	5.2100e-003	0.1286	0.0168	0.1454	0.0370	0.0161	0.0531		558.5275	558.5275	0.0488		559.7474
Worker	0.3208	0.2329	2.1474	6.4400e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		641.4920	641.4920	0.0200		641.9913
Total	0.4156	2.7140	2.8598	0.0117	0.7800	0.0213	0.8013	0.2098	0.0202	0.2300		1,200.0196	1,200.0196	0.0688		1,201.7387

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402
Total	1.7231	14.4685	14.9976	0.0219		0.9226	0.9226		0.8714	0.8714		2,064.1221	2,064.1221	0.4647		2,075.7402

Jamul Commercial - San Diego County, Winter

3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0775	2.2602	0.6404	5.1700e-003	0.1286	0.0108	0.1394	0.0370	0.0103	0.0473		554.6925	554.6925	0.0462		555.8474
Worker	0.3008	0.2103	1.9641	6.2300e-003	0.6514	4.4000e-003	0.6558	0.1728	4.0500e-003	0.1768		621.2259	621.2259	0.0181		621.6773
Total	0.3783	2.4705	2.6045	0.0114	0.7800	0.0152	0.7952	0.2098	0.0144	0.2241		1,175.9184	1,175.9184	0.0643		1,177.5248

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	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402
Total	0.2658	1.9659	15.1859	0.0219		4.8800e-003	4.8800e-003		4.8800e-003	4.8800e-003	0.0000	2,064.1221	2,064.1221	0.4647		2,075.7402

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0775	2.2602	0.6404	5.1700e-003	0.1286	0.0108	0.1394	0.0370	0.0103	0.0473		554.6925	554.6925	0.0462		555.8474
Worker	0.3008	0.2103	1.9641	6.2300e-003	0.6514	4.4000e-003	0.6558	0.1728	4.0500e-003	0.1768		621.2259	621.2259	0.0181		621.6773
Total	0.3783	2.4705	2.6045	0.0114	0.7800	0.0152	0.7952	0.2098	0.0144	0.2241		1,175.9184	1,175.9184	0.0643		1,177.5248

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	3.2098	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Jamul Commercial - San Diego County, Winter

3.6 Architectural Coating - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0457	0.4211	1.2600e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		125.7828	125.7828	3.9200e-003		125.8807
Total	0.0629	0.0457	0.4211	1.2600e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		125.7828	125.7828	3.9200e-003		125.8807

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	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		282.0423
Total	2.9730	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0238		282.0423

Jamul Commercial - San Diego County, Winter

3.6 Architectural Coating - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0457	0.4211	1.2600e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		125.7828	125.7828	3.9200e-003		125.8807
Total	0.0629	0.0457	0.4211	1.2600e-003	0.1277	8.8000e-004	0.1286	0.0339	8.1000e-004	0.0347		125.7828	125.7828	3.9200e-003		125.8807

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	3.1855	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Jamul Commercial - San Diego County, Winter

3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0412	0.3851	1.2200e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		121.8090	121.8090	3.5400e-003		121.8975
Total	0.0590	0.0412	0.3851	1.2200e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		121.8090	121.8090	3.5400e-003		121.8975

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	2.9433					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0218		281.9928
Total	2.9730	0.1288	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0218		281.9928

Jamul Commercial - San Diego County, Winter

3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0590	0.0412	0.3851	1.2200e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		121.8090	121.8090	3.5400e-003		121.8975
Total	0.0590	0.0412	0.3851	1.2200e-003	0.1277	8.6000e-004	0.1286	0.0339	7.9000e-004	0.0347		121.8090	121.8090	3.5400e-003		121.8975

3.7 Building Construction Crane Usage - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4410	5.2561	2.0064	5.0500e-003		0.2228	0.2228		0.2050	0.2050		499.8093	499.8093	0.1581		503.7626
Total	0.4410	5.2561	2.0064	5.0500e-003		0.2228	0.2228		0.2050	0.2050		499.8093	499.8093	0.1581		503.7626

Jamul Commercial - San Diego County, Winter

3.7 Building Construction Crane Usage - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0947	2.4811	0.7124	5.2100e-003	0.1286	0.0168	0.1454	0.0370	0.0161	0.0531		558.5275	558.5275	0.0488		559.7474
Worker	0.3208	0.2329	2.1474	6.4400e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		641.4920	641.4920	0.0200		641.9913
Total	0.4156	2.7140	2.8598	0.0117	0.7800	0.0213	0.8013	0.2098	0.0202	0.2300		1,200.0196	1,200.0196	0.0688		1,201.7387

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	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	499.8093	499.8093	0.1581		503.7626
Total	0.0620	0.2688	2.2744	5.0500e-003		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	499.8093	499.8093	0.1581		503.7626

Jamul Commercial - San Diego County, Winter

3.7 Building Construction Crane Usage - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0947	2.4811	0.7124	5.2100e-003	0.1286	0.0168	0.1454	0.0370	0.0161	0.0531		558.5275	558.5275	0.0488		559.7474
Worker	0.3208	0.2329	2.1474	6.4400e-003	0.6514	4.4700e-003	0.6559	0.1728	4.1200e-003	0.1769		641.4920	641.4920	0.0200		641.9913
Total	0.4156	2.7140	2.8598	0.0117	0.7800	0.0213	0.8013	0.2098	0.0202	0.2300		1,200.0196	1,200.0196	0.0688		1,201.7387

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

Jamul Commercial - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2873	5.1218	13.1067	0.0393	3.3775	0.0350	3.4124	0.9027	0.0327	0.9354		3,995.238 3	3,995.238 3	0.2351		4,001.115 6
Unmitigated	1.2873	5.1218	13.1067	0.0393	3.3775	0.0350	3.4124	0.9027	0.0327	0.9354		3,995.238 3	3,995.238 3	0.2351		4,001.115 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hardware/Paint Store	752.00	752.00	752.00	1,108,622	1,108,622
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	119.60	119.60	119.60	462,071	462,071
User Defined Retail	15.00	15.00	15.00	22,113	22,113
Total	886.60	886.60	886.60	1,592,806	1,592,806

4.3 Trip Type Information

Jamul Commercial - San Diego County, Winter

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
Hardware/Paint Store	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Retail	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hardware/Paint Store	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Unrefrigerated Warehouse-No Rail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
User Defined Retail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Jamul Commercial - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891
NaturalGas Unmitigated	4.4500e-003	0.0404	0.0340	2.4000e-004		3.0700e-003	3.0700e-003		3.0700e-003	3.0700e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

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					
Hardware/Paint Store	114.86	1.2400e-003	0.0113	9.4600e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004		13.5130	13.5130	2.6000e-004	2.5000e-004	13.5933
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	297.397	3.2100e-003	0.0292	0.0245	1.7000e-004		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003		34.9879	34.9879	6.7000e-004	6.4000e-004	35.1958
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4500e-003	0.0404	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

Jamul Commercial - San Diego County, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hardware/Paint Store	0.11486	1.2400e-003	0.0113	9.4600e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004		13.5130	13.5130	2.6000e-004	2.5000e-004	13.5933
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	0.297397	3.2100e-003	0.0292	0.0245	1.7000e-004		2.2200e-003	2.2200e-003		2.2200e-003	2.2200e-003		34.9879	34.9879	6.7000e-004	6.4000e-004	35.1958
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.4500e-003	0.0404	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.5009	48.5009	9.3000e-004	8.9000e-004	48.7891

6.0 Area Detail**6.1 Mitigation Measures Area**

Jamul Commercial - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Unmitigated	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

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	0.2161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8900e-003	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Total	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

Jamul Commercial - San Diego County, Winter

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.8086					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8900e-003	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460
Total	2.0266	1.9000e-004	0.0202	0.0000		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		0.0431	0.0431	1.1000e-004		0.0460

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Jamul Commercial - San Diego County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Jamul Commercial - San Diego County, Annual

Jamul Commercial
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	65.00	1000sqft	4.28	65,000.00	0
Parking Lot	83.00	Space	4.00	33,200.00	0
Parking Lot	6.30	1000sqft	1.00	6,300.00	0
Parking Lot	9.00	Space	0.09	3,600.00	0
Hardware/Paint Store	18.80	1000sqft	1.00	18,800.00	0
User Defined Retail	15.00	User Defined Unit	2.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW/hr)	525.68	CH4 Intensity (lb/MW/hr)	0.021	N2O Intensity (lb/MW/hr)	0.004

1.3 User Entered Comments & Non-Default Data

Jamul Commercial - San Diego County, Annual

Project Characteristics - RPS

Land Use - 12.37 acres

Construction Phase - cs

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading - Import 45,000 CY

Architectural Coating - rule 67 paint

Vehicle Trips - per traffic study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Rule 67 Paints

Energy Use - Outdoor Retail Areas connected to Tractor Supply will require lighting similar to Parking Areas.

Construction Off-road Equipment Mitigation - Tier 4 and Level 3 DPF

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100

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tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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
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	268.00
tblConstructionPhase	NumDays	300.00	10.00
tblConstructionPhase	NumDays	30.00	50.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	10.00	22.00
tblEnergyUse	LightingElect	0.00	0.35
tblGrading	AcresOfGrading	125.00	20.00
tblGrading	AcresOfGrading	0.00	20.00
tblGrading	MaterialImported	0.00	45,000.00
tblLandUse	LotAcreage	1.49	4.28
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	0.75	4.00
tblLandUse	LotAcreage	0.08	0.09

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tblLandUse	LotAcreage	0.43	1.00
tblLandUse	LotAcreage	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.021
tblProjectCharacteristics	CO2IntensityFactor	720.49	525.68
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CC_TTP	0.00	67.40
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	13.60
tblVehicleTrips	DV_TP	0.00	29.00
tblVehicleTrips	PB_TP	0.00	26.00
tblVehicleTrips	PR_TP	0.00	45.00
tblVehicleTrips	ST_TR	82.52	40.00
tblVehicleTrips	ST_TR	1.68	1.84
tblVehicleTrips	ST_TR	0.00	1.00
tblVehicleTrips	SU_TR	68.65	40.00
tblVehicleTrips	SU_TR	1.68	1.84
tblVehicleTrips	SU_TR	0.00	1.00
tblVehicleTrips	WD_TR	51.29	40.00
tblVehicleTrips	WD_TR	1.68	1.84
tblVehicleTrips	WD_TR	0.00	1.00

2.0 Emissions Summary

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2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.5088	4.1674	2.6995	6.8900e-003	0.4883	0.1723	0.6606	0.2258	0.1607	0.3865	0.0000	637.6973	637.6973	0.1160	0.0000	640.5978
2020	0.4744	1.6725	1.7722	3.3700e-003	0.0794	0.0939	0.1733	0.0213	0.0893	0.1106	0.0000	297.1669	297.1669	0.0449	0.0000	298.2893
Maximum	0.5088	4.1674	2.6995	6.8900e-003	0.4883	0.1723	0.6606	0.2258	0.1607	0.3865	0.0000	637.6973	637.6973	0.1160	0.0000	640.5978

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.2396	1.2932	2.7125	6.8900e-003	0.4883	5.6000e-003	0.4939	0.2258	5.3800e-003	0.2312	0.0000	637.6969	637.6969	0.1160	0.0000	640.5974
2020	0.3249	0.4144	1.7891	3.3700e-003	0.0794	1.9100e-003	0.0813	0.0213	1.8300e-003	0.0232	0.0000	297.1667	297.1667	0.0449	0.0000	298.2891
Maximum	0.3249	1.2932	2.7125	6.8900e-003	0.4883	5.6000e-003	0.4939	0.2258	5.3800e-003	0.2312	0.0000	637.6969	637.6969	0.1160	0.0000	640.5974

	ROG	NOx	CO	SO2	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	42.58	70.76	-0.67	0.00	0.00	97.18	31.02	0.00	97.12	48.83	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.5547	0.0297
2	4-1-2019	6-30-2019	2.4974	0.9920
3	7-1-2019	9-30-2019	1.0071	0.3037
4	10-1-2019	12-31-2019	1.1452	0.3953
5	1-1-2020	3-31-2020	0.7803	0.2692
6	4-1-2020	6-30-2020	0.7779	0.2667
7	7-1-2020	9-30-2020	0.5898	0.2023
		Highest	2.4974	0.9920

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003
Energy	8.1000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	124.5012	124.5012	4.8100e-003	1.0300e-003	124.9293
Mobile	0.2276	0.9365	2.3417	7.2300e-003	0.6003	6.3200e-003	0.6066	0.1608	5.9100e-003	0.1667	0.0000	666.6799	666.6799	0.0382	0.0000	667.6351
Waste						0.0000	0.0000		0.0000	0.0000	54.7223	0.0000	54.7223	3.2340	0.0000	135.5722
Water						0.0000	0.0000		0.0000	0.0000	5.2105	53.2535	58.4640	0.5373	0.0130	75.7829
Total	0.5981	0.9439	2.3497	7.2700e-003	0.6003	6.8900e-003	0.6072	0.1608	6.4800e-003	0.1672	59.9328	844.4380	904.3708	3.8143	0.0141	1,003.9232

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003
Energy	8.1000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	81.5953	81.5953	3.0900e-003	7.1000e-004	81.8833
Mobile	0.2276	0.9365	2.3417	7.2300e-003	0.6003	6.3200e-003	0.6066	0.1608	5.9100e-003	0.1667	0.0000	666.6799	666.6799	0.0382	0.0000	667.6351
Waste						0.0000	0.0000		0.0000	0.0000	41.0417	0.0000	41.0417	2.4255	0.0000	101.6791
Water						0.0000	0.0000		0.0000	0.0000	4.1684	42.6028	46.7712	0.4298	0.0104	60.6263
Total	0.5981	0.9439	2.3497	7.2700e-003	0.6003	6.8900e-003	0.6072	0.1608	6.4800e-003	0.1672	45.2101	790.8814	836.0916	2.8967	0.0111	911.8276

	ROG	NOx	CO	SO2	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	24.57	6.34	7.55	24.06	20.82	9.17

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/1/2019	4/1/2019	5	22	
2	Grading	Grading	4/2/2019	6/10/2019	5	50	
3	Paving	Paving	6/11/2019	7/15/2019	5	25	
4	Building Construction	Building Construction	7/16/2019	9/7/2020	5	300	
5	Architectural Coating	Architectural Coating	8/29/2019	9/7/2020	5	268	
6	Building Construction Crane Usage	Building Construction	9/1/2019	9/13/2019	5	10	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 20

Acres of Paving: 5.09

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 125,700; Non-Residential Outdoor: 41,900; Striped Parking Area: 2,586 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction Crane Usage	Cranes	1	7.00	231	0.29

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
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	5,625.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Crane Usage	1	51.00	21.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

3.2 Site Preparation - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2093	0.0000	0.2093	0.1104	0.0000	0.1104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.5013	0.2427	4.2000e-004		0.0263	0.0263		0.0242	0.0242	0.0000	37.5856	37.5856	0.0119	0.0000	37.8829
Total	0.0477	0.5013	0.2427	4.2000e-004	0.2093	0.0263	0.2356	0.1104	0.0242	0.1346	0.0000	37.5856	37.5856	0.0119	0.0000	37.8829

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3.2 Site Preparation - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	8.9000e-004	8.3900e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	2.2821	2.2821	7.0000e-005	0.0000	2.2839
Total	1.1000e-003	8.9000e-004	8.3900e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	2.2821	2.2821	7.0000e-005	0.0000	2.2839

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2093	0.0000	0.2093	0.1104	0.0000	0.1104	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1200e-003	0.0222	0.2296	4.2000e-004		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	37.5855	37.5855	0.0119	0.0000	37.8828
Total	5.1200e-003	0.0222	0.2296	4.2000e-004	0.2093	1.0000e-004	0.2094	0.1104	1.0000e-004	0.1105	0.0000	37.5855	37.5855	0.0119	0.0000	37.8828

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3.2 Site Preparation - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	8.9000e-004	8.3900e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	2.2821	2.2821	7.0000e-005	0.0000	2.2839
Total	1.1000e-003	8.9000e-004	8.3900e-003	3.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	2.2821	2.2821	7.0000e-005	0.0000	2.2839

3.3 Grading - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1643	0.0000	0.1643	0.0844	0.0000	0.0844	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1185	1.3630	0.8344	1.5500e-003		0.0596	0.0596		0.0548	0.0548	0.0000	139.2533	139.2533	0.0441	0.0000	140.3548
Total	0.1185	1.3630	0.8344	1.5500e-003	0.1643	0.0596	0.2239	0.0844	0.0548	0.1392	0.0000	139.2533	139.2533	0.0441	0.0000	140.3548

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3.3 Grading - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0247	0.8619	0.1880	2.2200e-003	0.0481	3.2200e-003	0.0514	0.0132	3.0800e-003	0.0163	0.0000	219.2610	219.2610	0.0199	0.0000	219.7573
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7700e-003	2.2500e-003	0.0212	6.0000e-005	6.2300e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.7000e-003	0.0000	5.7628	5.7628	1.8000e-004	0.0000	5.7673
Total	0.0275	0.8641	0.2092	2.2800e-003	0.0544	3.2600e-003	0.0576	0.0149	3.1200e-003	0.0180	0.0000	225.0238	225.0238	0.0200	0.0000	225.5246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1643	0.0000	0.1643	0.0844	0.0000	0.0844	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0190	0.0825	0.8250	1.5500e-003		3.8000e-004	3.8000e-004		3.8000e-004	3.8000e-004	0.0000	139.2531	139.2531	0.0441	0.0000	140.3546
Total	0.0190	0.0825	0.8250	1.5500e-003	0.1643	3.8000e-004	0.1647	0.0844	3.8000e-004	0.0848	0.0000	139.2531	139.2531	0.0441	0.0000	140.3546

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3.3 Grading - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0247	0.8619	0.1880	2.2200e-003	0.0481	3.2200e-003	0.0514	0.0132	3.0800e-003	0.0163	0.0000	219.2610	219.2610	0.0199	0.0000	219.7573
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7700e-003	2.2500e-003	0.0212	6.0000e-005	6.2300e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.7000e-003	0.0000	5.7628	5.7628	1.8000e-004	0.0000	5.7673
Total	0.0275	0.8641	0.2092	2.2800e-003	0.0544	3.2600e-003	0.0576	0.0149	3.1200e-003	0.0180	0.0000	225.0238	225.0238	0.0200	0.0000	225.5246

3.4 Paving - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0182	0.1906	0.1833	2.8000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	25.5940	25.5940	8.1000e-003	0.0000	25.7964
Paving	6.6700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0249	0.1906	0.1833	2.8000e-004		0.0103	0.0103		9.4800e-003	9.4800e-003	0.0000	25.5940	25.5940	8.1000e-003	0.0000	25.7964

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3.4 Paving - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	8.4000e-004	7.9400e-003	2.0000e-005	2.3400e-003	2.0000e-005	2.3500e-003	6.2000e-004	2.0000e-005	6.4000e-004	0.0000	2.1611	2.1611	7.0000e-005	0.0000	2.1627
Total	1.0400e-003	8.4000e-004	7.9400e-003	2.0000e-005	2.3400e-003	2.0000e-005	2.3500e-003	6.2000e-004	2.0000e-005	6.4000e-004	0.0000	2.1611	2.1611	7.0000e-005	0.0000	2.1627

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.5100e-003	0.0152	0.2162	2.8000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.5940	25.5940	8.1000e-003	0.0000	25.7964
Paving	6.6700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0102	0.0152	0.2162	2.8000e-004		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	25.5940	25.5940	8.1000e-003	0.0000	25.7964

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3.4 Paving - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0400e-003	8.4000e-004	7.9400e-003	2.0000e-005	2.3400e-003	2.0000e-005	2.3500e-003	6.2000e-004	2.0000e-005	6.4000e-004	0.0000	2.1611	2.1611	7.0000e-005	0.0000	2.1627
Total	1.0400e-003	8.4000e-004	7.9400e-003	2.0000e-005	2.3400e-003	2.0000e-005	2.3500e-003	6.2000e-004	2.0000e-005	6.4000e-004	0.0000	2.1611	2.1611	7.0000e-005	0.0000	2.1627

3.5 Building Construction - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1162	0.9573	0.9170	1.3200e-003		0.0646	0.0646		0.0610	0.0610	0.0000	114.8062	114.8062	0.0260	0.0000	115.4555
Total	0.1162	0.9573	0.9170	1.3200e-003		0.0646	0.0646		0.0610	0.0610	0.0000	114.8062	114.8062	0.0260	0.0000	115.4555

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3.5 Building Construction - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5900e-003	0.1519	0.0409	3.2000e-004	7.6300e-003	1.0100e-003	8.6300e-003	2.2000e-003	9.6000e-004	3.1600e-003	0.0000	31.1571	31.1571	2.5800e-003	0.0000	31.2217
Worker	0.0171	0.0139	0.1307	3.9000e-004	0.0385	2.7000e-004	0.0387	0.0102	2.5000e-004	0.0105	0.0000	35.5623	35.5623	1.1100e-003	0.0000	35.5900
Total	0.0227	0.1658	0.1716	7.1000e-004	0.0461	1.2800e-003	0.0474	0.0124	1.2100e-003	0.0136	0.0000	66.7194	66.7194	3.6900e-003	0.0000	66.8117

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1189	0.9187	1.3200e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	114.8060	114.8060	0.0260	0.0000	115.4553
Total	0.0161	0.1189	0.9187	1.3200e-003		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	114.8060	114.8060	0.0260	0.0000	115.4553

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3.5 Building Construction - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.5900e-003	0.1519	0.0409	3.2000e-004	7.6300e-003	1.0100e-003	8.6300e-003	2.2000e-003	9.6000e-004	3.1600e-003	0.0000	31.1571	31.1571	2.5800e-003	0.0000	31.2217
Worker	0.0171	0.0139	0.1307	3.9000e-004	0.0385	2.7000e-004	0.0387	0.0102	2.5000e-004	0.0105	0.0000	35.5623	35.5623	1.1100e-003	0.0000	35.5900
Total	0.0227	0.1658	0.1716	7.1000e-004	0.0461	1.2800e-003	0.0474	0.0124	1.2100e-003	0.0136	0.0000	66.7194	66.7194	3.6900e-003	0.0000	66.8117

3.5 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1542	1.2949	1.3423	1.9600e-003		0.0826	0.0826		0.0780	0.0780	0.0000	167.5923	167.5923	0.0377	0.0000	168.5357
Total	0.1542	1.2949	1.3423	1.9600e-003		0.0826	0.0826		0.0780	0.0780	0.0000	167.5923	167.5923	0.0377	0.0000	168.5357

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3.5 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7400e-003	0.2047	0.0543	4.7000e-004	0.0113	9.5000e-004	0.0122	3.2600e-003	9.1000e-004	4.1700e-003	0.0000	45.7866	45.7866	3.6200e-003	0.0000	45.8771
Worker	0.0237	0.0185	0.1770	5.6000e-004	0.0569	3.9000e-004	0.0573	0.0151	3.6000e-004	0.0155	0.0000	50.9468	50.9468	1.4800e-003	0.0000	50.9838
Total	0.0304	0.2232	0.2313	1.0300e-003	0.0682	1.3400e-003	0.0696	0.0184	1.2700e-003	0.0197	0.0000	96.7334	96.7334	5.1000e-003	0.0000	96.8610

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0238	0.1760	1.3591	1.9600e-003		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	167.5921	167.5921	0.0377	0.0000	168.5355
Total	0.0238	0.1760	1.3591	1.9600e-003		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	167.5921	167.5921	0.0377	0.0000	168.5355

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3.5 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7400e-003	0.2047	0.0543	4.7000e-004	0.0113	9.5000e-004	0.0122	3.2600e-003	9.1000e-004	4.1700e-003	0.0000	45.7866	45.7866	3.6200e-003	0.0000	45.8771
Worker	0.0237	0.0185	0.1770	5.6000e-004	0.0569	3.9000e-004	0.0573	0.0151	3.6000e-004	0.0155	0.0000	50.9468	50.9468	1.4800e-003	0.0000	50.9838
Total	0.0304	0.2232	0.2313	1.0300e-003	0.0682	1.3400e-003	0.0696	0.0184	1.2700e-003	0.0197	0.0000	96.7334	96.7334	5.1000e-003	0.0000	96.8610

3.6 Architectural Coating - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0119	0.0817	0.0819	1.3000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	11.3620	11.3620	9.6000e-004	0.0000	11.3860
Total	0.1428	0.0817	0.0819	1.3000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	11.3620	11.3620	9.6000e-004	0.0000	11.3860

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3.6 Architectural Coating - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4600e-003	2.0000e-003	0.0189	6.0000e-005	5.5500e-003	4.0000e-005	5.5900e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.1289	5.1289	1.6000e-004	0.0000	5.1329
Total	2.4600e-003	2.0000e-003	0.0189	6.0000e-005	5.5500e-003	4.0000e-005	5.5900e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.1289	5.1289	1.6000e-004	0.0000	5.1329

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3200e-003	5.7300e-003	0.0815	1.3000e-004		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	11.3620	11.3620	9.6000e-004	0.0000	11.3860
Total	0.1323	5.7300e-003	0.0815	1.3000e-004		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	11.3620	11.3620	9.6000e-004	0.0000	11.3860

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3.6 Architectural Coating - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4600e-003	2.0000e-003	0.0189	6.0000e-005	5.5500e-003	4.0000e-005	5.5900e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.1289	5.1289	1.6000e-004	0.0000	5.1329
Total	2.4600e-003	2.0000e-003	0.0189	6.0000e-005	5.5500e-003	4.0000e-005	5.5900e-003	1.4700e-003	4.0000e-005	1.5100e-003	0.0000	5.1289	5.1289	1.6000e-004	0.0000	5.1329

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.1507	0.1639	2.7000e-004		9.9300e-003	9.9300e-003		9.9300e-003	9.9300e-003	0.0000	22.8516	22.8516	1.7700e-003	0.0000	22.8959
Total	0.2851	0.1507	0.1639	2.7000e-004		9.9300e-003	9.9300e-003		9.9300e-003	9.9300e-003	0.0000	22.8516	22.8516	1.7700e-003	0.0000	22.8959

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3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6400e-003	3.6300e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.9896	9.9896	2.9000e-004	0.0000	9.9968
Total	4.6400e-003	3.6300e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.9896	9.9896	2.9000e-004	0.0000	9.9968

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0115	0.1640	2.7000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	22.8516	22.8516	1.7700e-003	0.0000	22.8958
Total	0.2661	0.0115	0.1640	2.7000e-004		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	22.8516	22.8516	1.7700e-003	0.0000	22.8958

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3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6400e-003	3.6300e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.9896	9.9896	2.9000e-004	0.0000	9.9968
Total	4.6400e-003	3.6300e-003	0.0347	1.1000e-004	0.0112	8.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0400e-003	0.0000	9.9896	9.9896	2.9000e-004	0.0000	9.9968

3.7 Building Construction Crane Usage - 2019**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2100e-003	0.0263	0.0100	3.0000e-005		1.1100e-003	1.1100e-003		1.0200e-003	1.0200e-003	0.0000	2.2671	2.2671	7.2000e-004	0.0000	2.2850
Total	2.2100e-003	0.0263	0.0100	3.0000e-005		1.1100e-003	1.1100e-003		1.0200e-003	1.0200e-003	0.0000	2.2671	2.2671	7.2000e-004	0.0000	2.2850

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3.7 Building Construction Crane Usage - 2019**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0126	3.3800e-003	3.0000e-005	6.3000e-004	8.0000e-005	7.1000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5750	2.5750	2.1000e-004	0.0000	2.5803
Worker	1.4100e-003	1.1500e-003	0.0108	3.0000e-005	3.1800e-003	2.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.9390	2.9390	9.0000e-005	0.0000	2.9413
Total	1.8700e-003	0.0137	0.0142	6.0000e-005	3.8100e-003	1.0000e-004	3.9100e-003	1.0200e-003	1.0000e-004	1.1300e-003	0.0000	5.5140	5.5140	3.0000e-004	0.0000	5.5216

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1000e-004	1.3400e-003	0.0114	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.2671	2.2671	7.2000e-004	0.0000	2.2850
Total	3.1000e-004	1.3400e-003	0.0114	3.0000e-005		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.2671	2.2671	7.2000e-004	0.0000	2.2850

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3.7 Building Construction Crane Usage - 2019**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6000e-004	0.0126	3.3800e-003	3.0000e-005	6.3000e-004	8.0000e-005	7.1000e-004	1.8000e-004	8.0000e-005	2.6000e-004	0.0000	2.5750	2.5750	2.1000e-004	0.0000	2.5803
Worker	1.4100e-003	1.1500e-003	0.0108	3.0000e-005	3.1800e-003	2.0000e-005	3.2000e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	2.9390	2.9390	9.0000e-005	0.0000	2.9413
Total	1.8700e-003	0.0137	0.0142	6.0000e-005	3.8100e-003	1.0000e-004	3.9100e-003	1.0200e-003	1.0000e-004	1.1300e-003	0.0000	5.5140	5.5140	3.0000e-004	0.0000	5.5216

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

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2276	0.9365	2.3417	7.2300e-003	0.6003	6.3200e-003	0.6066	0.1608	5.9100e-003	0.1667	0.0000	666.6799	666.6799	0.0382	0.0000	667.6351
Unmitigated	0.2276	0.9365	2.3417	7.2300e-003	0.6003	6.3200e-003	0.6066	0.1608	5.9100e-003	0.1667	0.0000	666.6799	666.6799	0.0382	0.0000	667.6351

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hardware/Paint Store	752.00	752.00	752.00	1,108,622	1,108,622
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	119.60	119.60	119.60	462,071	462,071
User Defined Retail	15.00	15.00	15.00	22,113	22,113
Total	886.60	886.60	886.60	1,592,806	1,592,806

4.3 Trip Type Information

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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
Hardware/Paint Store	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
User Defined Retail	14.70	6.60	6.60	13.60	67.40	19.00	45	29	26

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hardware/Paint Store	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Unrefrigerated Warehouse-No Rail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
User Defined Retail	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	73.5654	73.5654	2.9400e-003	5.6000e-004	73.8057
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	116.4713	116.4713	4.6500e-003	8.9000e-004	116.8517
NaturalGas Mitigated	8.1000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0299	8.0299	1.5000e-004	1.5000e-004	8.0776
NaturalGas Unmitigated	8.1000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0299	8.0299	1.5000e-004	1.5000e-004	8.0776

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hardware/Paint Store	41924	2.3000e-004	2.0600e-003	1.7300e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.2372	2.2372	4.0000e-005	4.0000e-005	2.2505
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	108550	5.9000e-004	5.3200e-003	4.4700e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7926	5.7926	1.1000e-004	1.1000e-004	5.8271
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.2000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0299	8.0299	1.5000e-004	1.5000e-004	8.0776

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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	tons/yr										MT/yr					
Hardware/Paint Store	41924	2.3000e-004	2.0600e-003	1.7300e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.2372	2.2372	4.0000e-005	4.0000e-005	2.2505
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	108550	5.9000e-004	5.3200e-003	4.4700e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	5.7926	5.7926	1.1000e-004	1.1000e-004	5.8271
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		8.2000e-004	7.3800e-003	6.2000e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0299	8.0299	1.5000e-004	1.5000e-004	8.0776

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hardware/Paint Store	236128	56.3034	2.2500e-003	4.3000e-004	56.4873
Parking Lot	11620	2.7707	1.1000e-004	2.0000e-005	2.7798
Parking Lot	1260	0.3004	1.0000e-005	0.0000	0.3014
Parking Lot	2205	0.5258	2.0000e-005	0.0000	0.5275
Unrefrigerated Warehouse-No Rail	237250	56.5709	2.2600e-003	4.3000e-004	56.7557
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		116.4713	4.6500e-003	8.8000e-004	116.8517

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hardware/Paint Store	148426	35.3914	1.4100e-003	2.7000e-004	35.5070
Parking Lot	2905	0.6927	3.0000e-005	1.0000e-005	0.6949
Parking Lot	315	0.0751	0.0000	0.0000	0.0754
Parking Lot	551.25	0.1314	1.0000e-005	0.0000	0.1319
Unrefrigerated Warehouse-No Rail	156325	37.2748	1.4900e-003	2.8000e-004	37.3966
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		73.5654	2.9400e-003	5.6000e-004	73.8057

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003
Unmitigated	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0394					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003
Total	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003

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6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0394					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003
Total	0.3697	2.0000e-005	1.8200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.5200e-003	3.5200e-003	1.0000e-005	0.0000	3.7600e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	46.7712	0.4298	0.0104	60.6263
Unmitigated	58.4640	0.5373	0.0130	75.7829

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hardware/Paint Store	1.39256 / 0.853507	7.0265	0.0456	1.1200e-003	8.5017
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	15.0313 / 0	51.4375	0.4917	0.0119	67.2812
User Defined Retail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		58.4640	0.5373	0.0130	75.7829

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hardware/Paint Store	1.11405 / 0.682805	5.6212	0.0365	9.0000e-004	6.8013
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	12.025 / 0	41.1500	0.3933	9.5400e-003	53.8250
User Defined Retail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		46.7712	0.4298	0.0104	60.6263

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	41.0417	2.4255	0.0000	101.6791
Unmitigated	54.7223	3.2340	0.0000	135.5722

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hardware/Paint Store	208.48	42.3196	2.5010	0.0000	104.8449
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	61.1	12.4028	0.7330	0.0000	30.7273
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		54.7223	3.2340	0.0000	135.5722

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hardware/Paint Store	156.36	31.7397	1.8758	0.0000	78.6337
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	45.825	9.3021	0.5497	0.0000	23.0455
User Defined Retail	0	0.0000	0.0000	0.0000	0.0000
Total		41.0417	2.4255	0.0000	101.6791

9.0 Operational Offroad

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

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

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

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Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B

SCREEN3 for PM₁₀

04/02/18
15:16:40*** SCREEN3 MODEL RUN ***
*** VERSION DATED 13043 ***

Jamul Commercial

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA
 EMISSION RATE (G/(S-M**2)) = 0.190000E-08
 SOURCE HEIGHT (M) = 3.0000
 LENGTH OF LARGER SIDE (M) = 238.7900
 LENGTH OF SMALLER SIDE (M) = 238.7900
 RECEPTOR HEIGHT (M) = 1.5000
 URBAN/RURAL OPTION = RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M**4/S**3; MOM. FLUX = 0.000 M**4/S**2.

*** FULL METEOROLOGY ***

 *** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
10.	0.4497E-01	6	1.0	1.0	10000.0	3.00	45.
100.	0.6783E-01	6	1.0	1.0	10000.0	3.00	45.
200.	0.8782E-01	6	1.0	1.0	10000.0	3.00	45.
300.	0.7503E-01	6	1.0	1.0	10000.0	3.00	45.
400.	0.6231E-01	6	1.0	1.0	10000.0	3.00	45.
500.	0.5275E-01	6	1.0	1.0	10000.0	3.00	45.
600.	0.4561E-01	6	1.0	1.0	10000.0	3.00	45.
700.	0.4024E-01	6	1.0	1.0	10000.0	3.00	45.
800.	0.3610E-01	6	1.0	1.0	10000.0	3.00	45.
900.	0.3286E-01	6	1.0	1.0	10000.0	3.00	45.
1000.	0.3018E-01	6	1.0	1.0	10000.0	3.00	45.
1100.	0.2794E-01	6	1.0	1.0	10000.0	3.00	45.
1200.	0.2602E-01	6	1.0	1.0	10000.0	3.00	45.
1300.	0.2434E-01	6	1.0	1.0	10000.0	3.00	45.
1400.	0.2285E-01	6	1.0	1.0	10000.0	3.00	45.
1500.	0.2150E-01	6	1.0	1.0	10000.0	3.00	45.
1600.	0.2029E-01	6	1.0	1.0	10000.0	3.00	45.
1700.	0.1919E-01	6	1.0	1.0	10000.0	3.00	45.
1800.	0.1818E-01	6	1.0	1.0	10000.0	3.00	45.
1900.	0.1725E-01	6	1.0	1.0	10000.0	3.00	45.
2000.	0.1642E-01	6	1.0	1.0	10000.0	3.00	45.
2100.	0.1567E-01	6	1.0	1.0	10000.0	3.00	45.
2200.	0.1500E-01	6	1.0	1.0	10000.0	3.00	44.
2300.	0.1437E-01	6	1.0	1.0	10000.0	3.00	45.
2400.	0.1378E-01	6	1.0	1.0	10000.0	3.00	45.
2500.	0.1323E-01	6	1.0	1.0	10000.0	3.00	44.
2600.	0.1271E-01	6	1.0	1.0	10000.0	3.00	45.
2700.	0.1222E-01	6	1.0	1.0	10000.0	3.00	44.
2800.	0.1176E-01	6	1.0	1.0	10000.0	3.00	45.
2900.	0.1133E-01	6	1.0	1.0	10000.0	3.00	45.
3000.	0.1093E-01	6	1.0	1.0	10000.0	3.00	45.

AQ ATTACH B SCREEN3

4500.	0.7023E-02	6	1.0	1.0	10000.0	3.00	44.
5000.	0.6207E-02	6	1.0	1.0	10000.0	3.00	42.
5500.	0.5536E-02	6	1.0	1.0	10000.0	3.00	45.
6000.	0.4978E-02	6	1.0	1.0	10000.0	3.00	43.
6500.	0.4511E-02	6	1.0	1.0	10000.0	3.00	40.
7000.	0.4111E-02	6	1.0	1.0	10000.0	3.00	36.
7500.	0.3782E-02	6	1.0	1.0	10000.0	3.00	45.
8000.	0.3494E-02	6	1.0	1.0	10000.0	3.00	35.
8500.	0.3244E-02	6	1.0	1.0	10000.0	3.00	35.
9000.	0.3023E-02	6	1.0	1.0	10000.0	3.00	39.
9500.	0.2826E-02	6	1.0	1.0	10000.0	3.00	43.
10000.	0.2651E-02	6	1.0	1.0	10000.0	3.00	32.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:
 197. 0.8802E-01 6 1.0 1.0 10000.0 3.00 45.

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.8802E-01	197.	0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

ATTACHMENT C

Health Risk Calculations

Air Quality Health Risk Calculations (Worst-Case)
Jamul Commercial (Tier IV)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.00137				
	Number of Workdays	397				
	Emission per day (lb/day)	0.006901763				
	Construction day (Hours)	8				
	Emission Rate (Grams/Second)	0.000108559				
	Project Site Size (Acres)	12.37				
	Project Site Size (meters)	50059.61395				
	Length of Smalles Side (meters)	223.7400589				
Used as an input to Screen3	Emission Rate over Grading Area	2.16859E-09				
From Screen3	1-hr Emission Levles (Ug/M^3)	0.0956				
Multiply by 0.08 for annual conversion	Concentration Annual (Ug/M^3)	0.007648				
			Construction Days converted to			
			years			
Duration	Construction Days	397	1.087671233			
Age (Years)	3rd Trimester (0.25)		0-2	2-9	2-16	16-30
						16-70
Cair (annual) - From F15	0.007648	0.007648	0.007648	0.007648	0.007648	0.007648
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000265	0.00000800	0.00000632	0.00000547	0.00000246	0.00000213
Construction Days	397	1.087671233				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.087671233	1.087671233	1.087671233	1.087671233	1.087671233
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	8.85075E-08	1.16267E-06	2.33383E-07	2.0194E-07	3.06887E-08	2.65664E-08
	0.088507463	1.162670955	0.233382508	0.201939568	0.030688741	0.026566372
Cancer Risk Per Million 9-years	1.48					
Cancer Risk Per Million 30-years	1.48					
Cancer Risk Per Million 70-years	1.48					